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THE

MEDICAL ANNALS:

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COMMON SENSE IN MEDICINE.

ANNUAL ADDRESS BEFORE THE ALBANY ACADEMY OF MEDICINE, SEPTEMBER 6, 1883, BY THE PRESIDENT, E. A. BARTLETT, M.D., A. M. C., '79, ALBANY.

"Doctor for worms in the increase of the moon, when they have their heads up, so that they will eat the medicine."—*Recipes for Human-Diseases, 90 pages, by a very learned, skillful and pious English author.*

"Worms in the human system are not only innoxious, but useful and intended as nature's remedy for destroying the superabounding morbid humours, and for stimulating the first passages by their crawling motions, and thereby assisting the peristalic motion of the guts to carry off what remains of the offending load."—*Butler on Remittent Fever.*

"Only in the present generation have sound views on the subject [worms] prevailed, and only since the discoveries of Kückenmeister and his followers has a satisfactory knowledge of the life-history of human intestinal parasites enabled the physician to appreciate their true importance in medicine."—*W. H. Ransome, M.D., Diseases of the Intestines, Wood's Library.*

The three quotations above given may serve to indicate three eras in the history of medicine — the first, when all bodily ills were supposed to be the result of offense given to some deity, or a demoniac possession; an era in which the tendency to magnify the unknown, the superstition of the masses, was such that the

wizard and the exorcist were enabled to practice their wiles and charms without let or hindrance; when the word of the medicine-man was equivalent to an utterance of the Delphic oracle, and when the most disgusting formulæ were prescribed, the most revolting practices encouraged.

The second was an era in which an extreme reaction took place, the people, as it were, becoming a law unto themselves and relegating the medicine-man to the shades from whence they had presumed the spirits came who produced such uncanny conditions. This era existed only a brief season, for, during all the dark ages of its history, medicine had some votaries who, joining in the general search for truth, the universal desire to know something of the Unknown, brought to the work an honesty of purpose and subtle intelligence which enabled them to bring order out of chaos. At the discovery of fixed laws dawned an era which has been pregnant with grand results, and which, receiving the embraces of Research, will yet bring forth more such children.

There is a Hebrew tradition that Abraham wore, suspended from his neck, a stone which, when looked upon, cured disease. When Abraham died God placed this stone in the sun. This story is formulated into the proverb, "When the sun rises the diseases will abate." How the ancient people may have regarded the truth of the proverb, how true it may be, it is not our purpose to consider, but it certainly is true that as the sunlight of intelligence pours its rays into the heretofore dark chambers of natnre, bringing to view facts instead of fancies, laws instead of mysteries, the relations between man and natural laws become more and more defined and the laws less and less likely to be infringed. In just so much as intelligence and education predominate over ignorance and illiteracy will the abatement of disease prevail. The time has arrived when he who would advance medicine one step must be a man who studies and investigates, who not only observes, but interprets; not only sees, but learns. Intelligence is the gift of God, but its development and strengthening are the work of man. Study and investigation develop, observation and interpretation strengthen; added to all, the teaching of experience beautifies by humbling. Even Sir Isaac Newton, with his comprehensive mind, when drawing near the close of his life, said of himself: "I am a little child gathering pebbles along the shore, while the great ocean of

knowledge lies stretched before me." As the security of the monumental shaft lies in the breadth and solidity of its foundation, so in the thoroughness of his preparation consists the safety of the medical man. He who enters upon the practice of medicine with a mind trained to consecutive thought, to thoroughness in investigation and to pertinacity in work meets the obstacles which bar his progress, not as a Quixote clashing against a windmill, only to be cast maimed and bleeding to the ground, but as a Cæsar, vigorous because of the forces at his command. Such a man lays seige to the great medical problems which lie as fortifications guarding the approaches to the city of Truth, makes breaches therein, and enters to take possession. A thoroughly furnished man is a help to the profession, of which proposition a corollary would be, a poorly furnished man is a hindrance; but among the thousands who annually enter the profession many are "dead weights" to be carried by the others, or worse, millstones hung about the professional neck, not from a want of mental culture. Many a smart, well-educated man proves a bane to his associates and their interests because he has not the inborn spirit of the true physician. Let a man, never so well educated, enter the profession as he would engage in stock-raising, for the sole and avowed purpose of making money, or let him regard his diploma as simply a passport to society or politics, and the chances are he will injure the profession. The man whose soul is filled with an earnest desire to know more of science for science's sake, and of medicine for the welfare of mankind, is the one who is to prove most helpful. If these facts were more impressed upon our minds, we should be more careful as to the class of young men we accept as students in our offices, and, having allowed a man to register, we would see to it that his mind is not only stored with knowledge, but trained to observe and interpret, to digest and make use of the material obtained during our preceptorship over him. Because a thorough course in a college of arts furnishes this training is one of the reasons why it is so desirable that a young man should have passed through such a course before entering upon medical lectures; but circumstances render it impossible for some to avail themselves of such opportunities, and in this case much more labor devolves upon the preceptor, for, however obtained, unless some such mental discipline or training has preceded his attendance upon lectures, the student is in danger of becoming a mere

automaton from hearing words and phrases which convey to him no intelligent meaning, and very soon the habit is formed of repeating and prescribing without any clear or definite reasons for so doing.

But though I have the university education, and all knowledge of anatomy and physiology, of surgery and obstetrics, though I understand the symptoms, nature and cure of all maladies, and have not common sense, I am no physician. One serious drawback to much of the so-called intellectual culture in the present age is that its recipient is prone to lose his common sense in proportion as he receives the culture — a result due, in part, to superficial methods of imparting knowledge and too great haste to complete a prescribed curriculum. In addition to the aid it furnishes in emergencies, to the modification it produces of other judgments which men form, sound common sense enables a man to read his fellow-men better than any acquirement. "The proper study of mankind is man;" man not only as a physiological but as an intellectual being, as a being acted upon by circumstances and actuated by idiosyncrasies. Developing civilization has been accompanied by an education of the æsthetic sense, and many a person gets well under the minute pellets and infinitesimal powders who would languish and die if compelled to take the nauseous mixtures of half a century ago; there are those, however, as of old, who value a medicine in proportion to its nauseous and disgusting qualities; there are those, also, who desire to be constantly taking medicine; those who like frequent calls from the doctor, and those who would have him cease his visits when immediate danger is passed; those who are constantly sick and never complaining, and those who, though constantly complaining, are seldom sick. Shrewd common sense will enable the physician to grasp these points in the disposition of his patient and hold them in trust for the patient's welfare. But woe to the man who, through his own inefficiency, has lost confidence in the drugs he prescribes; these very peculiarities of his patients will unsettle his opinions, render him uncertain as to his prescriptions and vascillating in his advice. The only justification a man can have for administering a drug to any one is his belief in its likelihood to be of service, and any one who, from ignorance or inefficiency, has no confidence in drugs can never be at his own command, nor in possession of a clear conscience, if he prescribes them. Common sense will

enable the physician to diagnose not alone the disease, but the patient as well, and habits of exact observation of the effects of drugs and the condition which lead to their exhibition will enable him to select the proper drug in proper form; he will then administer with a conscious honesty, which, in every case, inspires the confidence of the patient (which some say is more than half the battle).

So long as human nature exists there will be sickness, and so long as there is sickness there will be need of doctors and their medicines; but to cure or alleviate disease is not the whole of a physician's duty. The somewhat cynical statement of a man who evidently had observed the trend of professional sentiment is: "He who prevents disease is far more a benefactor of his race than he who cures it; the one saves suffering, toil and expense, while the other increases most of them." Dr. Hewitt, when president of the Minnesota State Board of Health, said in his annual address: "It is a great thing to benumb pain, but a greater to prevent it. It is a noble ambition and a lofty success to postpone death by the restraint of constitutional taint, but it is nobler to root out that taint and to prevent its local manifestation. To treat a fever and save the victim is good, but to prevent a fever is better." Few higher or nobler objects can engage the attention of physicians than the prevention of disease, and to the man who shall solve the problem of prophylaxis there is a record prouder than that of a Harvey, a Lænnec, a Bright, or any in the glittering constellation of discoverers. But to penetrate the arcana of Heredity, of Hygiene and of Pathogenesis is not the work of an hour, a day or a year; the plodding worker must slowly make his way, being oftentimes heart-sick and brain-weary. Will not this require thorough training of purpose and will? Think you the man of superficial attainments is adequate to the task? It will require the most liberal culture of intellect and a mind which shall be as a store-house of knowledge. Only by such means is it possible to differentiate the actual presence of a thing from an imagination of its presence. "A vivid imagination," it has been said, "supported by a good microscope can find bacteria in any and every thing;" straightway, all disease is the result of some germ, and the only medicines of value are germicides. Only by training in logical reasoning can those errors be avoided which result from mistaking hypotheses for established facts. Scaffolding is necessary in

the erection of a building, but it would be a great mistake to consider it the building. From all of which it follows that for the man who would do original work, as well as for the young man entering upon a general practice in medicine, the habits of close thinking and accurate investigation are not only necessities, but in them lies his safety. As we contemplate this portion of our subject our hearts are saddened by the recollection that a prominent laborer in this field has just passed away. A man whose broad culture and liberal acquirements, superadded to a natural genius for such work, had long since placed him in the van with those who devote their energies to the advancement of Hygiene and Preventive medicine. Let us be thankful that Dr. Jacob S. Mosher has lived and labored among us.

And now, gentlemen, a few words in conclusion. It is related of a certain preacher that his hearers always kept awake until he announced his "conclusion," when the most of them settled down for a long nap. There will be no necessity for such action on your part, for I shall be brief.

Sir Wm. Gull, in an address, once said: "It is the spirit of a man which enables him to do his work lightly and cheerfully, and he certainly will be helped in this by a combination with fellow-workers on the same subject." That we have work to do all will admit; that our work is difficult none will deny. In proportion as it is difficult we need the helping spirit one of another. While it may not seem possible for all to do original work, for the reason that many are hampered by the load of impecuniosity or the demands of an extensive practice, each one should feel it incumbent upon him to make some effort in this direction. Allow me, in this connection, to quote from a recent journal: "It would be very profitable to the physician himself, as to the professional whole of which he is a part, for every general practitioner to adopt some special subject for study and observation. Such a study would give us specialists of the better class, and would free us from the domination of the one-idea men, who have caused specialism to be regarded with so much suspicion by the broad-minded, many-sided physicians. Let each adopt a special subject for study and direct his experience and observation in general practice to its advancement, and he will find his opportunities for original work greatly multiplied" (*Therapeutic Gazette*, August, 1883.) The faculty

for exact observation differs with individuals. Two persons may read a book and each give a different account of it; two men may see the same accident and their several accounts of it, while true in general, will differ in the details; so two medical men may see a case of pneumonia, and the observations of each will be different in some respects. Civilization has given us new disease, or new forms of old types; inventive genius has furnished new means of diagnosis, improved instruments and more palatable pharmaceutical preparations. Through the observation and study of these by individuals, the results being given to each other for further consideration, to be passed through the refining fire of comparison and criticism, the profession as a whole will be benefited. In other words, "by the combination of fellow-workers on the same subject" experience is clarified and rendered fit for use by the mass of the profession. This is the ultimate object which those men had in mind who organized this society, over whose celebrations it has been my privilege to preside for the term just closing; it is the object of all similar organizations, and hence any such society is, as regards interest and profit, just what the members make it. It gives me pleasure to state that the papers furnished at our meetings have all been of a character to bring out much profitable discussion and interchange of views. I desire, here, to thank the members of the Academy for their cordial support in furnishing papers for our meetings. There has not been a meeting which you have not provided for, and still, many whom we would have liked to hear we have not had the opportunity of hearing. It is to be regretted that more of the members have not found it possible to be present to have shared in the benefits derived by those who were present and discussed the papers. That there have not been more present would seem to indicate that there is too great a draft upon the time of the busy practitioner; I would, therefore, suggest that the members of the Academy dissolve their academic relations and concentrate their energy within the County Society, putting forth hearty endeavor to make the official organization of the profession so much the more interesting and profitable.

By means of the regularly published periodical of the County Society the product of investigation, experience and study can be diffused through the profession, and so be accomplished "the greatest good to the greatest number."

To my associates in office I desire to extend my thanks for the faithful manner in which they have discharged their several duties, and for their hearty coöperation, without which much less would have been accomplished.

TRACHEOTOMY FOR DIPHTHERITIC CROUP.

BY E. T. RULISON, M.D., A. M. C., '75, AMSTERDAM.

In the place where my lot is cast, tracheotomy for diphtheritic croup is becoming a frequent and a very satisfactory mode of treatment. The four cases that I have to report present positive signs of diphtheritic infection, which shows, what I will endeavor to prove, that the operation should not be confined to those isolated cases of so-called membranous croup.

CASE I.—Florence H., aged two years and eight months. Was called November 20, 1881, and found her cyanosed and gasping for breath. As I then believed it to be a case of membranous croup, the glands of the neck not being enlarged, I determined to do tracheotomy. Drs. Cornell and E. E. Rulison concurring with me that it was the only means of saving the child, we operated immediately. She died seventy-five hours after the operation. Attended a brother of the girl a few days after for a mild diphtheria.

CASE II.—Herman K., aged four years. The family were just over from Germany. One child died of "sore throat" during the passage. Saw the little fellow December 2, 1882, and again the following day, when the respirations were so labored that, notwithstanding it was a genuine case of diphtheritic croup, it was decided to try tracheotomy, which I did, assisted by Dr. Reitz and my brother, Dr. E. E. Rulison. Died 122 hours after the operation. Eight in the house had diphtheria, and four died. This was the only case of the croupal form.

CASE III.—Mason C. T., aged six years. Assisted by Dr. Fairbanks and my brother, I did tracheotomy February 4, 1883. I had attended him for a week before the operation. A sister older had diphtheria two weeks before and recovered. A brother, nineteen months old, contracted the croupal form of diphtheria shortly after the operation and died. An uncle that

nelped nurse him had a severe attack of diphtheria, but recovered. The boy made a slow but good recovery.

CASE IV.—Erastus C., aged seven years. The croup was fully two weeks in developing symptoms that called for an operation. Assisted by Drs. Hyland and Cornell, tracheotomy was done October 22, 1883. At present writing (November 10) the boy is rapidly convalescing. This case was also of a decidedly diphtheritic nature. The cervical glands were much enlarged, and shortly after the operation two large diphtheritic patches formed on the margins of the wound. There have been several cases of diphtheria in the house during the past two years, one of them being of the most malignant type.

That all the cases were of diphtheritic origin appears to me beyond question. The recovery of two out of the four, I think, will fully exonerate me from all blame for doing the operation contrary to the advice of our most eminent writers. The details of the operation, and especially of treatment, I find are very meagre in our standard works on surgery; and if one be governed entirely by what he finds there, I honestly believe he will lose his patients in the great majority of cases. In my first and second cases I used the tube, had no intelligent idea of how I wanted to manage the treatment, and consequently had poor nursing, a variable temperature, a foreign body in the trachea, causing unlimited inflammation, etc., etc. In my third case I discarded the use of the tube. Never having seen nor heard how its use could be dispensed with, I passed a single ligature through the trachea on either side, leaving them of sufficient length to tie back of the neck; had the temperature of the room raised to 95° and kept there until breathing through the natural channel was fully establishnd; secured good ventilation by having muslin tacked over the openings made by raising and lowering the windows; saw that sufficient food, tonics and stimulants were administered; obtained moisture by the *constant* use of the steam atomizer, medicated with muriate ammonia and phenol, and had faithful and intelligent nurses to carry out the treatment ordered.

Immediately after this case I wrote to Dr. John Wyeth, of the New York Polyclinic, concerning the mode of procedure in operating without the tube. His answer I made use of in my fourth case, which is to cut through three rings of the trachea and suture the skin to the trachea passing through the rings.

The upper and lower ones are cut short, but the middle ones are left of sufficient length to tie back of the neck. This leaves a small wound, and makes it very easy indeed to remove all the secretions, the membrane in particular. I removed the short sutures at the end of twenty-four hours and the long ones twenty-four hours later. There is no particular time for removing them, the condition of the parts being the only guide. The operation itself is easily enough done, if one only has two good assistants with retractors to hold the tissues equally on each side as fast as one divides them. *The tube should never be used.* Cellulitis or broncho-pneumonia, or both, are sure to attend its use. The real work begins after the operation, and requires the utmost vigilance on the part of the attending surgeon and the untiring faithfulness of the nurse. With all due modesty, tinged with regret, I would say that most I have learned in treating tracheotomy cases necessity has compelled me to get by hard experience. Our text-books are certainly very deficient in regard to the after treatment, which I consider of the utmost importance.

I think the time will soon come when tracheotomy for membranous and diphtheritic croup will be classed among the safe and almost certain procedures in the treatment of disease.

PREVENTABLE DISEASES.

BY F. C. CURTIS, M.D., ALBANY.

Using the term in a broad sense, the range of preventable diseases is very large. We very well know that if mankind were surrounded universally with an environment of perfect sanitary conditions; if in the ruder states of living they were protected from hardship and exposure and supplied with all civilized comforts; if in more refined circumstances the attempts to secure ease were unattended with a train of co existent evils that luxury and indolence are pretty sure to entail, and which there is no possibility of entirely escaping the risk of; if vegetation and moisture and decay and the ordinary processes of nature in the country were deprived by some means of their unhealthful attributes, while on the other hand the baneful

elements of closely crowded masses of people in cities, with their accumulations of organic waste, which it is as yet found impossible to entirely get rid of without some contamination, and with the easy communication from one to another in large numbers of diseases that spread by contagion, were by some means removed; if poor people had enough for comfort, rich people too little for fatal ease, bad people gave themselves to a purer life, the needless use of alcoholics were suspended, and in all ways every thing were done that morality might suggest or science invent to remove etiological factors of disease that are clearly or obscurely apparent, a vast amount of sickness might be prevented and a great many lives lengthened.

The term "preventable diseases" is not, however, so wide as this in its technical sense. It may, however, be very fairly applied, in this sense, to the contagious diseases and to many of the zymotic disaases which prevail epidemically. It includes a large number of diseases which are the cause of much sickness. If it is really true that the number of diseases that can be prevented, in a broad and general way, is large, the fact comes out very strongly that the work of those devoted to hygienic study and application is very considerable, and that the medical profession is very greatly interested in the matter of preventing disease. And, certainly, there can be no work that is so grateful. Nothing can be more important than to address ourselves to a study of preventable diseases, to secure a correct knowledge of their preventable features, and to apply our knowledge constantly as fast as gained. One of the best papers on this subject was written by Dr. Elisha Harris, secretary of the State Board of Health, and was widely distributed through the state and printed in the daily papers, on "The Care of Life and Health," and was the principal agent in establishing our State Board of Health, and those who know him as a man, who has given a large part of his life to the study of state hygiene, will the more appreciate what he may say. He says: "It is now a demonstrated fact that more than one-third of the deaths and fully half of the sickness which the people suffer are preventable. Even the last census in our state showed that more than a fourth of all the mortality in the state during the census year was caused by the five most preventable diseases. They desolated the homes of culture and affluence as wantonly as those of the poor and dependent. Typhoid fever, diphtheria, scarlatina, small-

pox and most of the local causes of consumption are public enemies which assail all ranks, and these five destroyers were charged with 17,710 deaths in our state out of the 53,860 total mortality of the census year. We quote these numbers as the census gives them. The deficit in the enumerated numbers is estimated to be at least 40 per cent. It is estimated that upwards of 700,000 years of individual human life are every year destroyed by preventable deaths in the state of New York, and over 70,000 years are wasted annually in sickness. It is also to be remembered that these diseases lay hold of life at those periods when it is most active and of the greatest value. Vital losses exceeding 777,000 useful years in the active periods of life are thus wasted in this state every year, and, whatever may be the cost value of such lost life, it cannot be counted as being much less than $50,000,000."

On economic grounds the state may well set itself faithfully to the task of lowering this annual drain, and on much higher grounds the medical profession should address itself to a study of what enters into the causation of these diseases and to a faithful effort at their removal.

It is not within the scope of this paper, nor desirable for the discussion of this evening which I propose to introduce, to extend the range of our study over a wide ground. In regard to small-pox, we are all agreed as to its cause and the absolute possibility of its prevention. It is too late for any one to undertake to show that any thing is necessary to completely annihilate it except the one method of vaccination. Where thousands used to die of it single deaths now occur, since the introduction of the one remedy, and no physician fears to go near it with this protection.

Of scarlatina we are not yet prepared to say in what degree and direction it is preventable. It seems to have alliance, to some degree, with diphtheria. It is less contagious than the other eruptive diseases, and it is not satisfactorily proved that contagion is the only means of propagating the disease, and that it does not propagate itself spontaneously. There are those who would place it among the diseases produced by "filth," so called, or occurring in connection with the emanations from decomposing matter. There is certainly some epidemic influence that enters largely into its etiology, and which is, perhaps, more potent in its production than direct contagion. It would be

unsafe to say, however, at the present time, that it occurs independently of a pre-existing disease germ, although it may be that this germ is fostered in the presence of decomposing matter. There is no doubt, though, that the presence of this germ, in many cases, cannot be accounted for. Like other infectious diseases, the general sewer going to all houses furnishes an avenue of entrance, beyond a doubt. Beyond care in regard to this we are not in a position to say that we can prevent its spread, save by the process of quarantine.

As to diphtheria, which presents more interesting room for study, if we should formulate our knowledge regarding it, we should have to confess much ignorance — not, perhaps, as to circumstances under which it develops, but as to how to reconcile the varying circumstances. Dr. A. Clark, years ago, said in his lectures that we do not know what causes it. We do know, however, for one thing, that it is contagious. We also know that the contagium clings to houses and chambers where it has existed until destroyed by active efforts such as fumigating with chlorine. It also differs widely in this respect, but this is probably only proportioned to the virulence of the infectious matter. This matter can likewise be transported by a person not affected; of this we have numerous unfortunate proofs. It appears to thrive best, too, in the presence of other diseases, and it is so especially concomitant with scarlatina, and often so interchanges symptoms with it, that it gives the impression of relationship to it. Whether this disease, which in the course of six years, from 1874 to 1880, was the cause of 15,000 lives being lost in the two cities of new York and Brooklyn, ever originates from neglect of sanitary conditions is an interesting and important question. I do not believe we are justified in leaving any stone unturned, in the interest of orderly science, to discover whether it is not possible in any given case that by some means the disease germ was introduced; still, there will arise cases in which it is hard or impossible to find that it has been. In the city it is impossible to prove this, for we cannot eliminate its possible presence in the common-to-all avenue of the sewer. It is closely related to sewers. But in the isolated country there is better room to study in the narrower field. Some time ago, during last winter, I went with a sanitary engineer to visit a large institution of learning remote from here. There had suddenly occurred several cases, two ending fatally among the students, from diphtheria.

It was a rural locality, the building being at a distance from the little hamlet, which was quite off the line of common travel. In the neighborhood no case had occurred before, and it could not be learned that any outsider had been there, nor had any package been imported from outside, at least within a fortnight of the outbreak. It was in steady winter weather, and the location was elevated and healthful. The sanitary condition was, however, very faulty. The large cesspool, receiving slops and urine, was near the well, a privy was in the cellar of the large dormitory, and its vault ventilated into the chimney, which had stove-pipe holes into the affected rooms, and a recently introduced set of bath tubs emptied by faultily trapped pipes into the cesspool, which itself was not ventilated. The rooms, moreover, were damp and mouldy, dirty, with broken walls and many layers of wall paper, and the sleeping rooms had no ventilation except into the halls. There seemed no conclusion but that the disease originated from these conditions, and a rectification of them prevented any return of the disease. This fact, however, was not sufficient proof, for we are quite ready to accept, as proved, that hygienic condition influences the frequency and fatality of diphtheria. Want of cleanliness allows infectious particles to accumulate, and decomposing organic matter at least shields them from destruction, and doubtless gives them a good soil to germinate in; close, dark, damp, dirty premises and regions of a town are places where they linger, and they come forth from them to exert their fatal effects. We are not justified in allowing such conditions to exist, for whether we have settled or not the question as to the diseases originating here, we are certainly in a position to say beyond a question that such conditions favor the development and virulence of this unfortunate disease. It almost seems admissable to say that the disease will not flourish without them, and that, therefore, it may be considered one of the most justly preventable diseases, made so by removal of all such conditions.

The study of the relation of consumption to unhygienic conditions offers a tempting field and one not much considered. When the wife of Senator Plunkett, of Massachusetts, as I learn from Dr. Harris' paper before alluded to, was studying the unseen and neglected causes of a deadly outbreak of typhoid fever at the Maplewood Seminary, along with other results of bad sanitation, she learned from Dr. Bowditch "that most cases

of consumption are from local causes — damp grounds, wet cellars, and sloughs and undrained premises, as well as want of sunlight and good food." We are in the midst of a maze of facts and deduced theories regarding this disease, and we are nothing like so settled in our convictions as to what it is and what produces it as the profession were when they were satisfied with the theories of Louis. The diathesis theory, the inflammatory theory and the specific germ theory have been offered. It is well not to be settled until the facts are all in, and that it is safe to say is not yet. Meantime the clinical observer can satisfy himself as to what the disease is clinically and what favors its development. I have no doubt that the preventive causes mentioned by Dr. Bowditch are correct, and I would add to them the inhalation of air contaminated with sewer gas and decomposing organic matter. Whether the germ, if there be any, is communicable in this way I do not know, but that in its presence the disease more easily flourishes I think is certain. Certainly it is not alone the cause, for other environments, favoring lowered vitality, operate in like manner. In fact, it is said by a writer in the *Popular Science Monthly* that among animals in the wild state consumption is much more prevalent than among those in captivity, and he attributes it to exposure and the impossibility of escaping in their lairs from the effects of violent storms. But the delicate person, inheriting pulmonary weakness, is vastly more likely to contract the disease in the presence of air contaminated from the sewer. In looking for a proper condition of a house in which a consumptive is to spend the winter, I should look to the state of the house drains, among local conditions, and the cleanliness of the cellar and living rooms before I looked for dampness and want of sunlight, as suggested by Dr. Bowditch; and I think the disease would be more likely to develop in places thus unhygienic than in any other. I believe our present knowledge of the nature of the disease and the clinical experience of those whom I address will bear me out. To such degrees, then, consumption is preventable.

Typhoid fever is, *par excellence*, a disease related to bad sanitation. I may say that, as far as I now know, I believe in the germ theory of this disease, and I think it is generally accepted. I am not prepared to account for a great many cases that we all personally meet with in which it is not possible to see how the specific germ could have come in. Such cases as this are fre-

quently met with, where a man worked for one or two days to open a clogged drain from his house, which was detached, and about which no case of the disease had ever occurred, or at least diagnosticated as such. Within a week he is taken sick and develops undoubted typhoid fever. Many will follow Murchison in the belief that the specific cause of the disease may originate *de novo*. But such belief is not consonant with the sum of facts, althongh Murchison's pythogenic fever may be possible, and may be a continued fever of a different type from the typical typhoid. We certainly meet with a variation from this type very much. But real typhoid, no doubt, depends upon a *contagium vivum*, a micro-organism, a particulate germ, as Mr. Ernest Hart affirms. It may be formulated that there are four sources for the development of typhoid fever epidemics: (1) A common water supply carrying the infection; (2) a common sewerage, in the air of which the germ is disseminated; (3) a progressive soakage into wells from privies or cesspools, or even surface deposits; (4) a generally distributed article of food such as milk. Of this latter source of the disease, it is only ten or twelve years since it was recognized. It is now known as a means of spreading this disease, and also scarlatina and diphtheria. At the meeting of the International Medical Congress at London, Mr. Ernest Hart presented a classified record of fifty epidemics due to this source, and he noted fifteen of scarlatina and seven of diphtheria. It has assumed an important place in the list of preventable causes of this disease, and is to be borne in mind in looking for the cause of epidemics, if not of sporadic cases. A most carefully prepared, as well as one of the first worked out studies of an epidemic, determined to be due to this cause, was that of Dr. Ballard, at Ascot. The disease had prevailed for three years, 175 cases occurring, with fifty deaths, all having been drinkers of the suspected milk. It seems probable that an epidemic, largely due to a similar cause, is now in operation in one of the villages in this state. Here, of 125 families supplied with milk from the suspected source, 37 are sick. At least 75 per cent. of the sick took this milk, which did not constitute one-tenth of the town supply. The outbreak was sudden and affected all parts of the village, and prevailed most in the more healthy parts of the village, following the route of the milkman, and on the farm supplying most of his milk three cases of typhoid fever have existed since midsummer. The chances of contagion

are the use of cloths, by a possibility carrying the germs, to wash the cans, the use of water from a well infected by the germs, or the milk being directly infected from the clothing of milkers occasionally about the sick. But the pollution of water is the more common source of the disease, and when we consider the ease with which wells are infected by boring in the same narrow yard with privies and cesspools, we can only wonder that the human system resists so much. It certainly becomes accustomed by use to this poison just as it will to opium and arsenic, and resists its evil effects. The drainage bears a prominent part. And the people are very ignorant about drainage; they need constant instruction in common things. No physician should see a case of this disease, nor of diphtheria, without inspecting the premises for the cause. Some sanitary evils are hard to remedy, but the inspiration to apply one is tremendous.

We are constantly meeting a host of morbid conditions, possibly not definable by name, that we can trace to unsanitary conditions. There are persons sick with mild febrile disorders, or suffering with headache or neuralgia that has no cause, or are growing anæmic and have no appetite, or have functional derangement of the gastro intestinal or hepatic organs, which may be readily traced to preventable causes, to unsanitary dwellings. I have met such repeatedly of late, and I am sure others have. Often the cause is fortunately apparent in a vile smell. To mention one or two — in one house on North Pearl street a man and his wife were both ailing with the functional disorders referred to. The smell in the house was odious, though the landlord failed to perceive it. Insisting, however, on its reality, the drain under the basement floor was torn up, and found a most flimsy thing, rotten and broken open and the soil saturated and full of decomposition. A young lady living in an old house on Washington avenue, for years occasionally subject to malarial fever long ago contracted, was during this summer repeatedly attacked with a fever lasting a day, with most violent headacnes and nausea; there was a perceptible smell in the house, and search showed the waste pipe of the basin in her sleeping room broken and the ground below saturated. Removal to another locality caused her immediate and complete recovery.

I wish to say before I close that I consider the privies prevalent about the older parts of the town an abomination and a sin. If they had the least reason for existence they might be

tolerated, but they haven't. They ought to be abolished by city ordinance. They are an offense to the senses, and are fever nests of disease, offering every facility for developing, in this closely built city, pythogenic febrile disorders on a spot where micro-organisms can flourish riotously. There are not two opinions either regarding the wells — let us raise one voice for their disuse and abolition. The river water must be a symbol of purity compared with these holes in the ground under this soil always more or less saturated from the sewers. Let us see why disease exists — these preventable diseases — and then apply the remedy, beginning with some evils that we know are potent factors.

"Hippocrates was once summoned to Abydos, in Asia Minor, near the spot where Xerxes crossed the Hellespont, to redeem the place from the annual ravages of intermittent fever. He surveyed the condition of the city, discovered wherein the sickly portion was unlike the healthy portion, and resolved to arrest the evil at the fountain-head. He accordingly caused that portion of the city that abounded in swamps to be drained and filled up with earth, thereby stopping the decomposition of damp vegetable material, and secured uninterrupted exemption of that quarter of the city from intermittent fever from that day to this."

DISCUSSION.

After the reading of the paper, upon motion of Dr. Snow the privileges of the floor were extended to Dr. Elisha Harris, secretary of the State Board of Health.

Dr. HARRIS said: We wish to know what are the causes of those diseases which take off our loved ones. Albany has problems of this kind of the most interesting character. Although by nature one of the healthiest of cities, it has a considerable death rate. Patients, beautiful and refined, beloved by friends and under the care of physicians than whom the world possesses none better, die. This should not be; profession and people should see that such things exist no longer. Society in its organized condition we must appeal to, to open the way to investigation. Physicians, laying aside scholastic and private differences of opinion, constitute a band of men bound together to subserve the interests of mankind. It must enter into the scheme of civil government that the physician shall be asked to investigate and shall be supported in so doing. Almost the last words of my beloved and respected friend, Dr. J. S. Mosher, were: "I have plans which I hope soon to put in execution whereby such work shall be done." Investigation must be made under the *ægis* of civil authority. The local government must be interested. We must go down to bottom stones.

Medical minds may be on the track, but common observation sees what they may not; *ergo*, hear any one who has any thing to say. I have been studying this matter since 1853, and the more I study it the more important it becomes to me. There is nothing so godlike as the physician's calling; he cures and he prevents.

Dr. A. VAN DERVEER spoke of the difficulties under which the local Board of Health labors. It is difficult to obtain the co-operation of the authorities, and it is difficult to overcome the selfishness of individuals. The profession must impress upon the people the necessity for the abatement of nuisances.

President H. BENDELL said: The Board of Public Instruction, of which I am a member, has met with the same difficulty. A nuisance, apparent to the most casual observation, exists at school No. 7. It has been investigated and reported. The Board of Public Instruction is crippled because the Board of Health apparently cannot enforce its regulations. Scholars and teachers are taken sick and drop out, their places are filled only to be emptied again, and still the nuisance remains.

Dr. HARRIS: Courts and police are incompetent to enforce sanitary measures. The Boards of Health have, under the legislative enactments of 1881-2, the power to declare nuisances and enforce their regulations upon them.

Dr. JOHN THOMPSON spoke of the flooding of the Canal street sewer in 1880. As nearly all the houses in that neighborhood have privies in the yards, these were rendered very noxious. He knew of cases of typhoid and scarlet fever and diphtheria which were undoubtedly due to this flooding. He hoped the Board of Health would investigate the matter. He also mentioned a case of typhoid, the cause of which he considered to be the use of impure milk.

Dr. VAN DERVEER: The Board of Health has visited the school mentioned by President Bendell, and legal advice is that we can go only so far, then the Board of Health of Bethlehem must take up the matter. I desire to inquire if any experiments in tapping sewers and carrying off the gas by chimneys have been made at any of the manufactories here.

Dr. HARRIS: Experimental chimeys near Boston have proved failures; sewers breathe very much as lungs do; small localities may be so relieved, but larger cannot. Cribriform openings in the middle of the street are the best means for ventilating sewers.

BACTERIA; THEIR MUTABILITY.—Dr. Carpenter, at the British Medical Association, said that he believes that the same germs may, under altered circumstances, produce different diseases. A severe attack of any particular disease may so affect the system that a disease arises which cannot be recognized as related to that from which it proceeded. Under favorable conditions an ordinary intermittent fever may develop into a virulent form, which is highly contagious. Even the innocent hay bacillus may undergo such an alteration in its type as to become the germ of severe disease.—*Lancet.*

A CASE OF PYÆMIA WITHOUT CHILLS.*

BY CLINTON B. HERRICK, M.D., A. M. C., '80, TROY, N. Y.

The case that I have to report is one that I thought might be interesting, in showing how much trouble may result from a slight injury, as well as from its general surgical points. It is that of a boy ten years of age, of Irish parentage, always healthy. On Friday, March 17, 1882, while following a street procession, he was thrown down, striking on the edge of the curb-stone, receiving the fall chiefly on the left shin and right arm. It gave him so little pain that he continued with the procession through the city. On the next day he felt comparatively well, and continued so until the following Sunday morning, when, on rising from bed, he complained of soreness in the knee, but nothing seriously was thought of it. This continued so until the following Sunday morning, when he was unable to walk. I was then called, and found the parts about the left knee considerably swollen; there was pain on motion and indications of effusion into the joint. There was tenderness on pressure, but no redness nor sign of a bruise. He also complained of the right arm, which gave him pain on using, but presented no swelling nor physical indication of trouble. His temperature registered 101° and pulse 110; a dry, coated tongue and hot skin. Hot fomentations were ordered to both the knee and arm, and half a drop tincture aconite and one drop tincture belladonna given alternately every hour through the day, with eight grains Tully powder at night. During the following few days the knee and parts around it below became more enlarged, while the pain in the arm almost entirely disappeared. Meanwhile, the temperature and pulse remained high, but with no oscillation. A lead and opium wash was now applied to both parts. At this time — ten days after injury — he began to have pain in the hip of the right side, a slight cough started up, and the knee gave signs of increasing trouble. The patient became weaker, lost appetite and spirits, and was very delirious at night. Dr. McLean saw him with me March 26. The same treatment was continued, with the addition of an ammonium

* Read before the Rensselaer County Medical Society, November 18, 1883.

cough mixture and stimulants freely, with two grains quinine every four hours. Fluctuation could not be detected at this time in either arm or leg. The delirium became constant in the next two days, accompanied by mutterings and a profuse sweat. His temperature now rose to 103½°; pulse small and weak at 140; passed fæces and urine involuntarily, and death seemed imminent. In this condition he remained until the next morning (the 29th), when fluctuation was discovered in the swelling below the knee, which, being opened, freely discharged a considerable quantity of laudable pus, with some blood clots. Patient rested better that night without much change in condition. On the following morning the arm was also opened, near the wrist, discharging freely. He was now given syrup iodide of iron, with quinine. The pulse remained about 120 and temperature 102°, but without any chills. The arm and leg continued to discharge freely, while the hip of the opposite side gradually enlarged and became more painful. The delirium ceased, and appetite returned somewhat, although his general condition remained quite low. Warm applications, and the lead and opium wash were kept on the knee arm and hip and the expectorant continued for the slight cough. Early in April the patient had a relapse, the abscesses in the arm and knee discharged a great quantity of grumous pus, general condition became very apathetic, and a slight delirium was present, with high pulse and temperature. Quinine and stimulants were increased, and Tully powder given every four hours. After a few days in this condition he again began to rally, the discharge lessened, he took more nourishment, and seemed to do well. The cough ceased entirely, but the hip remained large, tense and painful, that leg being about two and a half inches shorter than the left one. Dr. McLean saw him again with me, and as the hip was in the state of morbus coxarius it was treated as such, the weight and pulley being applied and afterwards a long side splint. The granulations from the openings in the arm and leg pushed out in flabby masses, bleeding freely. Up to May the swelling in the knee joint had reduced scarcely any, and the hip remained in about the same condition. Generally, the patient had improved, appetite returned, and but little pain remained. Weight could not be borne on either leg, but the arm could be used quite freely. All medicine, except tonic, was discontinued. Weights and splints to the hips were continued for several weeks until all acute

symptoms left. The opening in the arm alternately closed and opened, a little matter oozing out. The knee remained large, and the opening belew discharged slightly. He now began to rest some weight upon the left leg, and with a crutch to support the right leg he could get about the hoase. At various intervals from this time pieces of bone were discharged from the opening in the leg, of which these shown are specimens. Several months elapsed before weight could be rested on the right leg, but at the beginning of the present year he could walk, with a limp, which a shoe raised three inches relieved somewhat. To the present time the opening in the leg discharges slightly. The former health and strength is nearly regained.

The case is peculiar from the fact of so much disturbance caused by so slight an injury. Were the symptoms the result of the absorption of pus, or due to a latent influence kindled up by the injury? Before pus was detected, and yet while it *must* have been present, the patient dropped into an apathetic state, with relapsing unconsciousness, fever and sweating, pain in the chest, a dry cough, painful joints other than the injured one, scanty and dark-colored urine, and had emaciated considerably. Here are all the usual symptoms of pyæmia, excepting chills, which is generallly its principal one. And, again, after the pus had free vent a relapse took place, quite as severe as the primary condition. And, further, could so slight violence produce such an amount of trouble in the hip joint, without any history of injury to that part, unless pus was absorbed and carried there?

ABSTRACTA.

Dr. C. W. Tangeman, of the Medical College of Ohio, has subjected cascara sagrada to a series of physiological experiments, the results of which he contributes to the *Therapeutic Gazette*. Cascara sagrada, in small doses (fifteen to twenty drops), acts like a vegetable bitter, stimulating the peptic glands. It acts on the sympathetic nervous system, sending increased blood supply to the intestines. It has a specific action on the rectum. It does not affect the small intestines more than any bitter tonic. It is not safe in pregnancy or uterine disorders. It does not affect the liver, pancreas or spleen. Hypodermically the remedy will not produce the good results obtained when given by the

mouth. Other contributors have found that cascara cordial, through its tonic laxative properties, is peculiarly applicable in constipation of elderly persons, and improves the spirits in dyspeptic disorders. As a vehicle for the administration of the more unpalatable drugs, and in the treatment of young children, it is a valuable addition to the physician's armamentarium.

VESICATION IN DIPHTHERIA.—Dr. W. F. Bartlett, of Buffalo, N. Y., communicates to the *Therapeutic Gazette*, for December, the results of his experience in the use of cantharidal blisters in diphtheria, applied immediately on the appearance of the exudate in the throat. The theory is that the materies morbi is eliminated through the blistered surface, while the counter-irritation also relieves the engorged pharyngeal surfaces. He regards the exudate in the throat as merely an announcement of the presence of the poison in the blood, and that from the nature of the epithelium on impinging of inspired air primarily upon those surfaces, the partial elimination of the morbid element is accomplished.

CORROSIVE SUBLIMATE IN GONORRHŒA.—Dr. Joseph McChesney, of Deming, New Mexico, contributes to the *Therapeutic Gazette*, for December, a report of a series of seven cases of gonorrhœa treated with injections of corrosive sublimate, one grain to six ounces of water, once every four hours after the subsidence of the acute stage. He is confident that this solution will cure gonorrhœa within ten days. In several cases this injection was resorted to after a long and unsuccessful course with the ordinary remedies; the result was uniform success.

THE OCEAN CURE FOR PHTHISIS gets new weight by a case reported by Dr. Thorowgood in the *Weekly Medical Review*. A young lady of 17 had pleurisy in 1878, following which respiratory murmur was very feeble, crepitant sounds were heard and systolic murmur over the pulmonary valves. She made very slow progress, although sustaining remedies were used and a prolonged stay at Torquay. In June, 1881, there was husky cough in the morning, pulse 100, and much crepitant râle. A prolonged voyage in a sailing vessel to Melbourne and back was advised. On her return there was scarcely a trace of dullness, no cardiac murmur, cough nor expectoration, and beyond weak breath sound generally, no sign of pulmonary unsoundness, and she looks robust and strong. She needed no treatment on the

voyage, and has retained her health since. It is recommended that such voyages be taken early before the lungs are gone in cavities.

ORIGIN OF BACILLI.—Bouchardt denies the specificity and and contagion of the so-called tubercle bacillus. He attributes these organisms to a fault of nutritition, as a result of which leucocytes acquire the power of transforming themselves into pathogenic bacilli.—*Berliner Klin. Wochenschrift.*

DR. CARL SEILER, late director of the microscopical and biological section of the Academy of Natural Sciences of Philadelphia, lecturer on diseases of the throat, University of Pennsylvania, Philadelphia, Pa., says: "I have used the preparation called Iodia, as manufactured by Battle & Co., of St. Louis, both internally and locally by means of a spray in cases of throat affections, and found it admirably suited to certain cases."

FOR THE PREVENTION OF SEA-SICKNESS, Dr. Henry Bennet, in the *British Medical Journal*, highly recommends the following plan: A good, easily-digested meal should be taken four hours before embarking. Just long enough before embarking to secure its absorption a cup of strong black coffee should be taken. The stomach should be entirely empty; a full stomach rather promotes sea-sickness. The influence of the coffee on the nervous system lasts eight or ten hours, during which time the body may get accustomed to the motion of the ship. It is better to take no food nor drink till hunger or thirst shows itself. For thirst soda or Apollinaris water, with brandy or champagne, or clear, may be sipped. To allay hunger, *café au lait*, with or without a little bread, may be taken, and that aggrieving, a little curry may be tried as advised by Dr. Randall. On long journeys, after the coffee, one should lie in his berth. In the continued sickness of long voyages great and often permanent relief may be obtained by rectal injection at night of fifteen or twenty drops of laudanum in an ounce and a half of warm water, which, if not retained may be repeated in an hour and a half.—*American Practitioner.*

HOT-WATER ENEMATA are recommended for the purpose of hastening delivery, by Dr. Beckinsale, in the *British Medical Journal.*

THE MEDICAL ANNALS.

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

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THE MEDICAL ANNALS, 1884.

Our fifth year begins with this number.

As showing public appreciation of what has been done, the publishing committee may be pardoned for mentioning that several articles which would never have seen the light but for the MEDICAL ANNALS have been reprinted entire in other publications.

It is probable that we shall be able to provide as good material in the twelve months to come.

The Albany Academy of Medicine has dissolved for the express purpose of concentration of interest in the County Society, and this move may reasonably be expected to increase the value of our County Society fruitage. The producers vary from year to year; and, although the society has scarcely changed in its number, yet substraction and addition have made great changes in the roll of membership.

To those whose names remain upon the list of active members there remains work to do, and the proper society work of each member is such as shall reflect to his credit when mirrored forth in his society's journal.

But the MEDICAL ANNALS is not merely the magazine of our single county. Our friends in neighboring counties have shown a fraternal interest by subscribing, and also by furnishing news and other valuable matter. And the thousand alumni of the Albany Medical College, now living scattered throughout the United States, are a constituency from whom we especially solicit items, however brief, relating to the annals of the Alumni Association, and from whom we receive contributions to medical science, of personal interest and practical value to our readers.

From these allied supporters — our neighbors and our alumni family — we have received the encouragement not only of material support, but of flattering compliments as well, and we trust that our future work will merit the same. L. H.

THE CODE AND OUR RELATIONS TO HOMŒOPATHY.

That the great medico-scientific work of 1883 has been the silencing of all objectors to the demonstrated truths of Köch, Pasteur and others; that the bacillus tuberculosis exists, either as cause or consequence in disease, and that many of our commonest drugs are at present regarded as owing their chief value to their parasiticidal or bacteria-cidal property — all this is now common ground to both homœopath and officinal practitioner.

The microscopic investigations of high triturations of metals by Dr. Conrad Wesselhoeft, of Boston, two years ago, while of course not comparable with the discovery of "Köch's bugs," have also had a positive effect to rationalize the quondam Hahnemannian.

It is a fact that there is among homœopaths a wide-spread rejection of the Hahnemannian infinitesimal. It is also a fact that there really are persons in our county societies and in the State society who believe (although others regard their views as delusions) that the therapeutic indication of certain drugs is to meet symptoms resembling those which result from the physiological action of those drugs, while they wholly reject the so-called dynamized infinitesimal dose. As a consequence of these two facts there is a third fact, which is, that, instead of the former diametrical dissimilarity, there is now increasing correspondence in the materia medica and dosage actually employed by some members in the opposing schools of medicine; hence, between such persons on the border lines of the two camps a degree of affiliation is irresistible.

With this general modification of medical ideas, is it a wonder that, in our state, the last year has witnessed the affirmation of the liberal code of ethics? The not uncertain voice of the Empire State has shaken the world.

Many good men are grieved at heart, and cannot recognize *vox populi* as *vox Dei.* But during the time in which we have already lived under the new code have any bad effects occurred? Are personal rights in any way trammeled by the

present code? Let it be clearly understood that by this new code no individual is compelled against his will to consort nor to consult with a homœopathic practitioner; but, at the same time, by this code no individual in this free country can interdict another from consultation with any legally recognized physician.

Even if the code of the American Medical Association should be reasserted by vote of our State Society next month, the old fence, once down, can never be established as it was. If before the day of the new code individual practitioners even then indulged in affiliation with homœopaths, and maintained its legality, a reverse action of the State Society will be in no respect a restraint now. It is not possible, by any procedure, to undo what has been done.

As far as the homœopath is concerned, has not the code question, by the act of the State Society in 1883, ceased to be a living issue? L. H.

——A HOMŒOPATH, Dr. Archibald Reith, is elected president of the Medico-Chirurgical Society of Aberdeen! Several years ago this same man was forced to resign his physicianship in the Royal Infirmary.

——CHARLES A. VAN DERVEER.—The new year is saddened, not only to the medical profession, but to a shocked and sympathizing public, by the death, on the last Sunday of 1883, of Charles Anson Van Derveer, aged 16, the eldest son of Dr. Albert Van Derveer.

After a sickness of less than one week, he succumbed to a perforation of the intestine, resulting, as was found, from the lodgment of two grape seeds in the appendix cæci.

The young man was universally popular, as the natural result of a gentlemanly and kind-hearted disposition and of his diligence and thoroughness in all his duties.

As co-editors with Dr. Van Derveer we extend to the parents our special sympathy, although we know that the sympathy of their friends cannot assuage the bitterness of their cup of sorrow.

——SANFORD R. BLATNER.—Dr. Joseph H. Blatner also mourns for a son, Sanford R. Blatner, aged 6, who died of diabetes on that same fatal Sunday, December 30, 1883.

That the households of two members of our County Society should be stricken in the same day makes these sad afflictions the more impressive. We "weep with them that weep."

——The Collective Investigation of Diphtheria, as conducted by the *Therapeutic Gazette*, Detroit, Mich., with editorial summary by J. J. Mulheron, M.D. Detroit, Mich.: George S. Davis, medical publisher. 1883.

There is nothing new in this book, and the opinions of the one hundred and eight contributors are monotonously uninteresting. There are, no doubt, many arguments in favor of this method of book-making, but in order to obtain the best results more care than is here apparent must be exercised in the choice of the contributors. It appears to be a mere waste of time and trouble to print scores of opinions unsupported by any pretence of reason, such as "I believe it to be of constitutional origin," and "It is contagious." It is certainly unnecessary to print on nearly every page formulæ for the administration of tincture of chloride of iron and chlorate of potassium. There are a few articles of considerable interest, and if they were published separately they would make a very readable book. J. B. S.

——Index Medicus.—F. Leypoldt, publisher, 31 and 32 Park Row, New York. For five years this cyclopædia of medical reference has indexed all medical articles as soon as published. It has every month kept its subscribers fully posted up to the times in every phase of medical discussion and investigation and progress.

The limited circulation at the subscription price of $6.00 has caused an annual deficit, which, in the most prosperous year, amounted to over $1,400. This debt has been paid each year by voluntary contributions from generous friends, but now this great American undertaking will be abandoned unless a sufficient number of subscribers for 1884 can be secured at an advanced price.

As a matter of national and professional pride every county society can well afford to subscribe $12 for one copy, as has already been done by the Medical Society of the County of Albany. Or smaller clubs of individuals could order a copy by a division of subscription, which would fall lightly on each member. If over 500 subscribers are obtained, the price will be only $10 to each.

Subscribers to the Medical Annals are urged to interest themselves in this matter of the *Index Medicus*.

——The Archives of Pediatrics, Jersey City, $3.00, a monthly journal of diseases of infants and children, makes its

first appearance this month. Editor, Wm. P. Watson, M.D., Jersey City; collaborators, J. Lewis Smith, M.D., New York; J. M. Keating, M.D., Philadelphia; F. Forchheimer, M.D., Cincinnati; Marcus P. Hatfield, M.D., Chicago; Henry D. Ingraham, M.D., Buffalo; Jos. P. Oliver, M.D., Boston; Edw. Borck, M.D., St. Louis; Wm. T. Plant, M.D., Syracuse; Jerome Walker, M.D., Brooklyn; also, James F. Goodhart, M.D., London; James Finlayson, M.D., Glasgow; Henry Ashby, M.D., Manchester; A. D. Blackader, M.D., Montreal. Translations from the German, French and Italian current literature will be made by Dr. And. F. Currier, of New York, and abstracts from the English by Drs. L. Emmett Holt, J. B. McMahon, Robert Milbank and Wm. P. Northrop, of New York, Dr. Louis Storr, of Philadelphia, Drs. G. K. Dickinson and John Van Vorst, Jr., of Jersey City, and others.

——The Sanitarian for 1884 will resume the monthly issue, enlarged to 96 pages, octavo. The weekly publication of 1883 proved a constant inconvenience to both editors and readers. Many excellent articles are unsuitable for a weekly because of their length. Editors have vied with each other in lavish expressions of favor toward this journal. We copy a few specimens from many: "Preëminently the most practical magazine published in the interest of health." "Should be in every household in the land." "By far the best of its class." "Doing more good than any other magazine published in this country." Subscription, $4.00, may be sent to A. N. Bell, 113 Fulton street, New York.

——The Æsculapian, a New York monthly journal of medicine and surgery, edited by Edward J. Bermingham, A.M., M.D., Vol. I., No. 1, $2.00 a year, double column octavo, is received. All who "think it deserving of support" are requested to "forward subscription by return mail." It merits favor.

——Outing and the Wheelman, Boston, the new magazine resulting from the union of *Outing*, of Albany, and the *Wheelman*, of Boston, "is now the only illustrated magazine in the country devoted wholly to the literature of out-door recreation, pleasure travel and physical culture." Hence, this is, in a sense, a health journal; and, more than that, it certainly is breezy and wholesome literature for every family. And as the bicycle and, later, the tricycle are becoming favorite and fashionable steeds for the physicians' use, we commend this periodical as attractive

and valuable for every doctor's family. Subscription, $2.00. To subscribers of the MEDICAL ANNALS we will send *Outing and the Wheelman* for the clubbing price of $1.50.

——THE PANSY, by Mrs. G. R. Alden, a weekly pictorial magazine for young people, is published by Lothrop & Co., Boston, Mass., at 75 cents a year.

Mrs. Alden ("Pansy") has shown in the *Pansy* that religious stories are as entertaining and strong as the matter in *St. Nicholas* or *Wide Awake*. The articles entitled "How They Went to Europe" and a galaxy of shorter stories make this magnificent magazine a means of unconscious mental development.

——BINDING THE MEDICAL ANNALS of 1883 will be looked after by the publishing Committee, if volumes for binding and portraits or other pictures to be bound with them are left, as last year, at No. 17 Washington avenue. The price for uniform cloth binding, similar to that of previous volumes of Transactions, with the electrotype lettering on the back, will be but fifty cents.

——COPIES OF THE MEDICAL ANNALS, Vol. I., No. 3, June, 1880, Vol. II., No. 6, June, 1881, and Vol. IV., No. 9, September, 1883, are wanted at this office. Ten cents each will be paid.

——ANTISEPTICS IN PUERPERA.—We have for some time past given our preference almost exclussvely to Listerine as an antiseptic in the puerpera. We think it has *real* advantages over any other, while it certainly is much more acceptable to the patient. The objects to be attained in the use of vaginal washes after confinement are, first, to secure cleanliness, second, to arrest and prevent putrefaction, and last, but by no means least, to promote *early* healthy action in the lacerated soft part — channels through which septic matter may be absorbed. The importance of this early reparative action cannot be overstimated, as it is a well-known fact that with the healing paocess once begun, septic virus is repelled, in lieu of being absorbed, as is the case before healing begins or when the abraded surfaces have taken on unhealthy action. We had long employed the carbolic acid for the purposes above enumerated, but, observing disagreeable constitutional influences from its use, we selected the Listerine, which has proven a powerful non-toxic antiseptic, promptly promoting the reparative process and substituting an agreeable perfume for a noxious odor.—*Prof. F. L. Sim, M.D., Memphis College Hospital, in Mississippi Valley Monthly.*

COLLEGE AND ALUMNI NOTES.

THE various alumni of the Albany Medical College who from time to time visit their *alma mater* can but be greatly and pleasantly impressed with the extensive improvements made, during the last vacation, in and about the College. To give minute details would require too much time and space. Suffice it to say that, with one shade of red and two of brown paint, all has been done that well could be to render the exterior of the College agreeable to the eye. But the improvements made inside are those which cause a gush of thankfulness from the heart of every one of our students. No longer are we to sit and listen to lectures on hygiene, with a dissecting room immediately under us; that worthy and necessary apartment has taken flight, and gone up to the fourth floor. Adjoining this is a near and commodious prosecting room, and in the extreme north end of the main building a well arranged vivisecting apartment for the professor of physiology.

ON invitation of the managers of the *Concordiensis* — a paper till recently published in the interests of Union College alone — one associate editor from the Albany College of Pharmacy and one from each class of the Law School and Medical College were chosen, thus forming a University magazine.

NOTICE was recently "posted" at the College that clinics will be held at the Child's Hospital, Hawk street, near Elk, on Wednesday and Thursday afternoons from four to five o'clock. The graduating classs are invited to attend as follows: Those gentlemen whose names commence with letters from A. to K., inclusive, on Wednesday, the remainder on Thursday.

DR. HUN holds a clinic on nervous diseases, at St. Peter's Hospital, Tuesday of each week, at quarter past five o'clock.

STUDENTS have the privilege of attending six clinics each week.

DR. THEOBALD SMITH ('83) has received an appointment, at an advanced salary, in the United States Agricultural Department of Cornell University. Dr. Smith is a graduate of Cornell, and for some time past has been at that institution "pursuing advanced work in comparative anatomy and histology, and has made some admirable preparations for the University. S. E. A.

ASSOCIATION OF THE ALUMNI, ALBANY MEDICAL COLLEGE.

The time is drawing near for the next annual reunion of the Alumni Association, which will be held on March 5 or 6, 1884. Timely notice of the meeting will, as usual, be given through the mails, but in the meantime it may be well to recall attention to the Alumni prizes and some other matters relating to the annual meeting. It will be remembered that the prizes offered are four in number: (1) A single prize of three hundred dollars for the best essay on "Colles Fracture," accompanied by a specimen; (2) a medal for the best essay on "Talipes;" (3) a prize of one hundred dollars for the best descriptive essay on "Inguinal Hernia;" and (4) another prize of like sum for the best essay on "The Effect of Climate in the Treatment of Pulmonary Tuberculosis." It is hoped that such liberal prizes and interesting topics may enlist the attention of many of our alumni and prompt them to enter the lists in competition. Full particulars concerning the prizes may be obtained by addressing the Secretary of the Association, at No. 4 Lancaster street, Albany.

In the death of the President, Dr. Jacob S. Mosher, the first vice-president, Dr. Frederick S. Greene ('46), of Coxsackie, N. Y., will preside and deliver an address. A eulogy on Dr. Mosher will probably be pronounced, and, indeed, the meeting will partake of the nature of a memorial meeting. Interesting reports are promised from the historian and the class historians of '54, '64 and '74, and the usual dinner will take place in the evening after the commencement exercises of the College are concluded. The address to the graduating class will be delivered by the Hon. Henry R. Pierson, Chancellor of the University of the State of New York.

Altogether the exercises for alumni day this year promise to be of unusual interest, and it is hoped that every graduate of the College who can possibly do so will endeavor to be present. There are no formalities connected with the association, no election to membership, no initiation fee nor compulsory dues, and every alumnus is urged to attend its meetings and interest himself in its affairs.

W. G. T.

THE

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SOME CASES OF DELIRIUM TREMENS, TREATED WITH HALF-OUNCE DOSES OF TINCTURE OF DIGITALIS.

BY HENRY HUN, M.D., ALBANY.

During the past twenty years the giving of digitalis in large doses has been recognized as one of the standard methods of treatment of delerium tremens, and, although within the last ten years this form of treatment has been replaced, rightly, I think, by a combination of hydrate of chloral and bromide of potassium, yet I would like to present to the society a report of six cases of delerium tremens treated by half-ounce doses of the tincture of digitalis.

The discussion of these cases will be more fruitful if we consider, in this connection, the other common methods of treating this disease, and there is one question as to the cause of disease on the answer to which will depend, in great part, our plan of treatment.

It has long been a matter of dispute whether delirium tremens is due to the direct poisonous action of the alcohol or whether it is due to the sudden stopping of drinking, and hence to the sudden withdrawal from the system of its accustomed stimulant. There can be no doubt that in many cases delirium tremens is caused directly by drink. Many patients have entered the hospital during my term of service in a wild condition of delirium tremens who have continued to drink up to the very hour of entrance. On the other hand, a number of

patients have entered the hospital in a drowsy, stupid condition brought on by drink, and it was not until a day or two later that delirium tremens proper came on. In these cases it might seem as though the delirium tremens did not appear until the drink was withdrawn and then appeared in consequence of this withdrawal. It is well known that drunkards can put off an impending attack of delirium tremens by continuing to drink, but whether they can thus postpone the attack indefinitely is a matter of doubt; judging from my limited experience I should say not. After a time the stomach is apt to get into such a condition that it will no longer retain alcoholic drinks; but even in those cases where the stomach will tolerate the alcohol, still the attack of delirium tremens will sooner or later come on and cannot be indefinitely postponed by drink. The opinion that delirium tremens is caused directly by the drink and not by its withdrawal has of late years gained more and more ground, and at the present time I think the great majority of those who have had much experience in the treatment of delirium tremens incline to this view and hence believe in stopping all alcoholic drinks immediately, instead of gradually diminishing the quantity of them, as has been advocated by those who believe that the withdrawal of the alcohol is the cause of the disease.

The question is somewhat different in the case of injuries. When an habitual drunkard, who has enfeebled his nervous system as well as all the other organs of his body by the long continued abuse of alcohol, receives some severe injury, he soon afterwards becomes tremulous and delirious and passes into a condition of very dangerous exhaustion. Now, this form of delirium tremens may perhaps in part depend on the sudden withdrawal of the usual alcoholic stimulant, but it depends, it seems to me, in much greater part on the shock which the injury produces upon the enfeebled nervous system and on the extra work incident to the process of repair which is thrown upon the enfeebled and diseased internal organs, especially upon the kidneys. In this form of the disease it seems necessary to administer alcohol in some form, although I am inclined to believe that digitalis would be a better stimulant to the heart and kidneys in these cases. I have, however, no experience in this surgical form of the disease and in what follows I refer only to those cases which are the result of excessive drinking for a few days or weeks.

In the form of delirium tremens which is the result of a short but excessive abuse of alcoholic drinks and which is caused by the direct poisonous action of the alcohol, the first thing to be done in the way of treatment is to prevent any more alcohol from entering into the system, and to eliminate as soon as possible the alcohol already in the system. By means of some purgative, such as calomel, we may get rid of any alcohol which is in the alimentary canal and liver, and by means of a diuretic we can increase the action of the kidneys and favor the sweating which nature of her own accord usually produces in such cases. For, as is well known, alcohol is eliminated by the skin, lungs and kidneys, especially by the kidneys. Besides seeking to eliminate the alcohol we must also try to keep up the strength of the patient, for not only is the body enfeebled by drink, but it is customary for a person when drinking heavily to go days and weeks without taking any food whatever. On this account we must try and keep the patient quiet, so that he may not waste any more strength, and we must try and get him to eat often, tempting him to take milk, and milk with an egg in it, and broths, and as soon as possible solid food.

Such is the general treatment of delirium tremens—food, rest, a diuretic and moderate purgation, with entire abstinence from alcohol; and this general treatment is by far the most important of any.

On such general treatment the vast majority of cases will recover; for it must not be forgotten that delirium tremens is a self-limited disease of very short duration. As long ago as 1831, Dr. Ware, of Boston, showed that this disease might safely be left to itself to run its course and that it terminated in recovery in from sixty to seventy-two hours. It is rarely possible, however, to employ this expectant form of treatment; the patients are frequently so noisy and so violent that they must be put into a strait-jacket, or what is still better, must be confined in a padded room. Even when the appliances are at hand, there is always danger that the patient may wear himself out with his efforts and die from exhaustion. In private practice the friends of the patient will usually insist on some quieting medicine being given.

On this account it seems desirable to find some drug which will allay the excited action both of the brain and heart, and produce sleep, so that the patient may not exhaust himself

completely before the disease has run its course and the greater part of the alcohol has been eliminated; and yet it is important always to bear in mind that the patient will, in all probability, recover without treatment, and that there is no necessity for any very heroic measures.

Since the practice of bleeding, which not infrequently caused a fatal termination in this disease, was abandoned, a number of remedies have been introduced with the hope of causing sleep and a speedy termination of the disease, and these remedies are all used at the present day. The first of these remedies to be tried was opium, which was given in such large and frequent doses that it in many cases substituted opium for alcohol poisoning, and in this way caused the death of the patient. In most cases of delirium tremens it is very difficult to produce sleep with opium, and such large quantities have to be given that this kind of treatment is more dangerous than the expectant treatment. It is safer to give morphia hypodermically than opium by mouth, because it is impossible to say how rapidly absorption takes place from the stomach in cases of delirium tremens. The treatment by opium was almost universal until 1860.

In 1860, Mr. Jones, of Jersey, recommended the use of tincture of digitalis in large doses in delirium tremens, and cited seventy-seven cases of cure by this means and only one death. He was led to adopt this method of treatment because a patient with delirium tremens swallowed by mistake an ounce of the tincture of digitalis, with benefit to himself. Mr. Jones recommended that half an ounce of tincture of digitalis be given and repeated in four hours, and that six hours later two drachms of the tincture be given. This method of treatment was soon very extensively tried, and the dose was even increased in some cases. Thus, Dr. D. M. Williams gave half an ounce of tincture of digitalis at two, four and seven o'clock — that is, an ounce and a half in five hours, and the patient made a rapid recovery. The method of treatment by tincture of digitalis proved itself to be superior to that by large doses of opium, and also to two other methods introduced at about the same time. One of these, which was recommended by Dr. Kinnear, consisted in giving large doses (a scruple) of cayenne pepper every two or three hours, and the other, introduced by Dr. Peddie, consisted in giving tartar emetic in small but frequent doses.

About 1870 hydrate of chloral was tried in delirium tremens, the bromide of potassium having been used with much success a few years before. In hydrate of chloral we have, I believe, the best agent for producing a calm and refreshing sleep in cases of delirium tremens, and thus hastening recovery. At the same time, the following cases of digitalis treatment are not without interest, for I think that there are some cases of great depression, with a rapid, feeble pulse, in which the digitalis is, perhaps, of greater service than the chloral.

Case I.—Male aged 38, who is in the habit of indulging in periodical sprees. This time has been drinking hard and eating little or nothing during the past week. Has slept but little. Has no hallucinations, but feels nervous. On entrance patient was still stupid from drink. There was a slight tremor of hands and tongue, and he was very nervous and dreaded the approaching night. At 5 P. M. his pulse was 130 to 135, compressible, and at that time he was given half an ounce of tincture of digitalis. He passed a pretty quiet night. The next morning his pulse was 90 and stronger. He felt better, but had no appetite. The next night he was again given half an ounce of tincture of digitalis. He slept well, felt much better, began to eat well. Pulse was 75, but upon any exertion it ran up to 90–100. Two days later he was discharged well.

This was not a very severe case. The pulse was, however, quite high, but fell rapidly under the effect of the digitalis, and when the circulation was quieted sleep came. There was no decided effect on the excretion of urine.

Case II.—Male, aged 56, who is in the habit of indulging in periodical sprees. This time has been drinking hard and eating almost nothing during the past two weeks. Has slept very little. During the past two nights has seen bears, wolves and other animals in constant motion. Is very nervous. On entrance patient looked very much broken down and as if he were going to have a very severe attack. His speech was stammering and indistinct, and his hands and tongue were very tremulous. At 1 P. M. his pulse was 85 and of fair strength, and at that time he was given half an ounce of tincture of digitalis. At 5 P. M. he was given fifteen grains of chloral and thirty grains of bromide of potassium, and this dose was repeated at 8 P. M. He slept at intervals during the night, although he continued to be troubled by hallucinations of sight. The next morning he felt better,

although he was still very tremulous. During that day he took two drachms of tincture of digitalis at 2 P. M. and again at 6 P. M., and at 8 P. M. he was given ten grains of chloral and twenty grains of bromide of potassium. He slept well during the night. The next morning he was less tremulous and began to eat with appetite, and required no more medicine while he remained in the hospital, except a little compound tincture of gentian for his appetite.

This case was a much more severe one than the first, and in addition to the digitalis a small amount of chloral and bromide was given, which doubtless aided in the production of sleep. The hallucinations in this case were of bears, wolves, etc., and it is curious how rare it is to find any hallucinations about snakes, although formerly the disease was often called "seeing snakes."

CASE III.—Male, aged 28; had been drinking hard and eating little or nothing during the past two or three weeks. He complained of feeling very nervous and of not being able to sleep, but had no hallucinations. On entrance there was almost no tremor of hands and tongue. He was given fifteen grains of chloral and thirty grains of bromide of potassium every four hours. He slept a little that night, and remained in the same condition during the next day. But the next day after — that is, after he had been in the hospital forty-eight hours — the symptoms of delirium tremens became much more decided, notwithstanding the chloral and bromide which he had taken. He became much more tremulous and nervous. The chloral and bromide was stopped, and in the evening he was given half an ounce of tincture of digitalis. He passed a restless night, and on the next day he was very tremulous and violent and had a great many hallucinations. He was given two drachms of tincture of digitalis, but in the night he became so violent that he had to be put in a strait-jacket. On the next morning, that is, on the fifth day of his stay in the hospital, he was still in the strait-jacket, and was very violent, trying to escape from three men who were constantly trying to shoot him. He was given one-third of a grain of sulphate of morphia hypodermically and two hours later one-quarter of a grain, but he continued very violent, and destroyed the furniture in the room. Towards evening he became exhausted and passed a fairly quiet night, and on the next day was so quiet that the strait-jacket could be

removed. In the evening he became very tremulous and nervous and violent. His pulse was 110 and compressible. He was then given half an ounce of tincture of digitalis, after which he went to sleep and slept well most of the night. The next morning the pulse was 65, full and strong. There was scarcely any tremor, and the patient felt well and eat with appetite, and the next day was discharged from the hospital well.

This was a very violent case of delirium tremens, which came on in spite of the chloral and bromide which the patient was taking, and which ran its course uncontrolled by the digitalis or morphia in the doses in which they were given. The half ounce of tincture of digitalis which was given when the disease was at its end and when the patient was tremulous and exhausted and had a rapid, compressible pulse seemed to have had a very good effect.

CASE IV.—Male, aged 29. Has been drinking heavily during the past two months and very hard during the past two weeks. He has eaten next to nothing; has slept pretty well. On entrance the patient was very tremulous and nervous and so restless that he could not sit still for a moment. He staggered so that he could scarcely walk. He coughed almost constantly and raised a large amount of thick yellow phlegm. I suspected pneumonia, but was unable to make any satisfactory examination, because of the restlessness of the patient. His pulse could not be accurately counted, but was apparently 130. Patient complained greatly of oppression in breathing and of pain in the chest. At 11.30 A. M. patient was given half an ounce of tincture of digitalis, and at 8 P. M. he was given another half ounce. He passed a restless night, but in the morning was rather steadier, and he eat a little. At noon he was given half an ounce of tincture of digitalis, but his pulse continued rapid. At 4 and 7 P. M. he was given a hypodermic injection of one-quarter of a grain of sulphate of morphia. He had a very bad night. In the morning his pulse was 112, and he was very tremulous. He complained greatly of the oppression in his chest. He had hallucinations of hearing, and heard people trying to break into his room. At noon he was given half an ounce of tincture of digitalis, which he immediately vomited. He continued to grow wilder. In the evening he was given half an ounce of tincture of digitalis and one-quarter of a grain of morphia hypodermically. During the night he was violent, and

kept pounding on the door of his room. At 3 A. M. he began to grow exhausted. His pulse then was strong and full, but intermitted every four or five beats. It could not be counted on account of the tremor. He sank rapidly and died at 5 A. M.

This case was the the only one that died. The digitalis was given pretty freely but did not reduce the frequency of the pulse, although the pulse kept strong and full till within a very short time before death. I am inclined to think, from the appearance of the patient that pneumonia was present in this case. The half grain of morphia which was given hypodermically did not quiet him at all.

The other two cases do not need extended notice. In one, a woman, chloral and bromide in moderate doses had been given without much effect, but one drachm and a half of fluid extract of digitalis, followed some hours afterwards by a drachm of the fluid extract, produced sleep, and the patient made a rapid recovery. In the other case the patient was given half an ounce of tincture of digitalis on entrance, but it produced no other good effect than to reduce the pulse from 130 to 102. Afterwards sleep was produced by chloral and bromide, and the patient made a good recovery.

From these cases it is seen that tincture of digitalis in half-ounce doses is well borne by the system. In most cases it causes a reduction in the frequency of the pulse, and by thus allaying the vascular excitement it often causes sleep. As a sleep-producing agent it is far inferior to chloral and bromide of potassium. In the case which terminated fatally I think pneumonia was present, although I was unable to hold an autopsy. The pulse did not indicate poisoning by digitalis. Tincture of digitalis, it seems to me, is only of value in very exceptional cases of delirium tremens where the pulse is very rapid and weak and there is great exhaustion. In such cases half-ounce doses of the tincture may be of use in strengthening the heart's action and producing a more regular circulation. In all other cases hydrate of chloral seems to me to be preferable.

During the summer and fall while these six cases were being treated with tincture of digitalis, seven other cases of delirium tremens entered the hospital which were treated by chloral and bromide. All of these cases made a rapid recovery. To be of much service the chloral must be given in doses of at least twenty grains, and doses of thirty and forty grains are certainly

much more effective. It is true that doses of thirty and even twenty grains of choral have caused death, bnt such cases are very rare, and Lewin, in his recent book on the "Untoward Effects of Drugs," thinks that deaths from chloral are due to impurities in the drug, and do not occur when the chloral is pure.

DISCUSSION.

Dr. M. J. LEWI cited three cases in which the delirium tremens seemed to have been produced by the withdrawal of stimulants. The first was that of a tall, strong man who was brought to the hospital on account of a broken leg; received the injury while deeply under the influence of liquor; stimulants were not given, and in a little time delirium tremens came on, which, in spite of the treatment instituted, lasted thirty-six hours. The second was that of a man who in a drunken fight received a severe scalp wound; stimulants were not administered on his admission to the hospital, and delirium tremens came on, lasting, as in the other case, nearly thirty-six hours. The third was a genuine case of "snakes," developed under somewhat peculiar circumstances. He remarked that although this disturbance is popularly known as "snakes" he had seen but this one case in which the hallucination took that particular form.

Dr. F. C. CURTIS: At a homœopathic state medical society meeting one of the high-potency men reported that he could find no appropriate remedy for "snakes." Upon further investigation of the provings it was found that Arg. Nit. should be such remedy, and upon trial it was found to be so, relieving the trouble in three months.

Dr. A. VAN DERVEER: We ought to be persevering in testing remedies, and we ought also to classify our cases. In his practice capsicum had proved of service in cases occurring in persons of phlegmatic temperament, while in those cases presenting a shiny tongue, chloral and bromide of potassium.

Dr. S. PETERS believed that in the majority of cases stimulants render very material assistance. He cited a case in which opium had been very perseveringly administered for three days, but the patient continued raving. Another physician having been called, in his absence, stimulants were given, and the patient made a good recovery.

Dr. D. C. CASE enquired if heart failure is not the cause of delirium tremens primarily.

Dr. H. HUN thonght not. In some of his cases the pulse was strong and numbered eighty five beats. Delirium tremens is rather the result of the action of alcohol on the brain.

Dr. D. C. CASE again, in reply, suggested that the distinction between alcoholic mania and delirium tremens is indicated by the fact that in the former the patient is strong and violent, while in the latter he is generally weak.

Dr. D. H. COOK said: We should distinguish between cerebral anæmia and cerebral hyperæmia. In the latter potass. brom. would be indicated;

in the former, opium. He had found hot baths, chloral, bromide of potassium and tincture lupuline of service in the treatment of these cases.

Dr. J. W. MOORE called attention to a proprietary article named Bromidia as being excellent in delirium tremens.

Dr. R. D. CLARK said: Cases of delirium tremens differ one from another, and we ought, as far as possible, to select remedies for special cases. Bromide of sodium, chloral, capsicum and whiskey, in a vehicle of the bitter tonics, had proved of service. If this fails, twenty grains chloral and forty to sixty grains of bromide of sodium may be given. He recalled a case in which the above plan of treatment did no good, while a little morphia succeeded. Digitalis in large doses he thought dangerous; he recalled a case in which the fatal termination was due to its use. It is certainly not always successful, and we ought to use safer remedies. His experience as jail physician was that the lack of food is a very important factor in the causation of delirium tremens. He had found Squibb's "hot drops" of service in checking what is popularly called the "dry retch."

Dr. H. HUN, in closing the discussion, said: Digitalis should be given only in cases characterized by a rapid pulse. The treatment with chloral and bromide is better.

Dr. EZRA BARTLETT, Exeter, N. H., whose attention has been called to Dr. Hun's article, writes: "For the tremens I would suggest the use of Squibb's fluid extract of nux vomica, one minim of which is equal to one grain of the nux. This, in combination with chloral, would fulfill the indications—a tonic and a hypnotic—the dose of each to be governed by the symptoms."

DELIRIUM TREMENS.*

BY JNO. BEN. STONEHOUSE, M.D., A. M. C., '71, ALBANY.

I am inclined to consider delirium tremens as a symptom of nervous exhaustion, and would exclude from a description of it the acute maniacal delirium, which differs markedly in its character, and is undoubtedly due to the direct irritant effect of the alcohol. Delirium tremens is, in some of its phases, not unlike the delirium of certain cases of typhoid fever and other diseases characterized by great depression. All the peculiar symptoms of delirium tremens may be produced by causes other than alcohol. In the *Lancet* of October 11, 1862, a case is narrated of a stoker of good chatacter, serving on board H. M. S. "Regnard," who fell, apparently in consequence of the shock following the murder of two of his shipmates by the Japanese, into a state identical to that of delirium tremens, not one symp-

* Portion of a paper read before the Albany Academy of Medicine.

tom being absent. It was proved that he had not been indulging in alcoholic excess. Fox (*Lancet*, May 7, 1859) records a case to the same effect, the disorder supervening upon exposure to cold and wet. Such cases are to be found scattered through medical literature. I have seen three cases of ether habit with mental symptoms simulating very closely those of delirium tremens. I have also seen a case of cerebral neurasthenia with similar symptoms. The length of time necessary to produce this exhaustion varies, of course, with the condition of the person, the character and amount of alcohol used, etc. At times a mental or physical shock, by suddenly adding to the depression, hastens the delirious attack. I think it is very important to a successful treatment of this disease to recognize these points.

In the case of the acute delirium of drunkenness, the patient is violent and destructive, without exhibiting any of the characteristic hallucinations. These attacks seldom occur except where predisposition exists by previous mental or nervous disorders or heredity, and are best treated by a combination of depressants and sedatives.

My efforts towards the treatment of delirium tremens are mainly directed to the administration of food. I give no alcohol, principally because it interferes with digestion. Where the bowels are constipated, as is usually the case, I give one large dose of calomel, or a stimulant enema, if the stomach will not tolerate the powder. A tepid or even cold bath, followed by vigorous friction, repeated as the case demands, is of the greatest value, not only in aiding elimination, but also in quieting the nervous system and producing sleep. But, over and above all other remedies, I rely upon food. If a patient will retain one-fourth to one-half pint of warm milk, with or without the addition of the yolk of an egg, an excellent prognosis of the case can be given, and if he can take and retain mutton chop or other solid food, the battle is gained. Gastric irritability is, however, so frequently a symptom of these cases that it is impossible to give food by the mouth. Sometimes the application of an ice-bag to the epigastrium is of service in allaying this irritability, especially if at the same time small doses of morphia be given hypodermically. No time, however, should be lost in these efforts. Rectal alimentation should be immediately employed. I have used dessicated blood per rectum in three cases with excellent results, and have reason to advise its trial by

others. Sleep and recovery will, in many cases, follow these remedies, but if they do not we must use drugs. Digitalis has in may hands produced very satisfactory results, but, of course, it requires the presence of the physician to administer and watch its effects. In the few cases where digitalis fails I use a combination of morphia and bromide of ammonium or morphia hypodermically. I have an increasing fear of chloral. It is seldom serviceable in a smaller single dose than forty-five grains (Boehm declares forty-six grains to be the largest dose that should be given the average *healthy* adult). The great majority of the cases of chronic alcoholism present as important symptoms gastric irritability and diminished heart energy, and both of these conditions are greatly increased by the administration of chloral. Its use is, I think, all the more dangerous when the patient cannot be relied upon to call attention to minor ill effects of the drug, thus allowing the sometimes fatal results to be established without warning.

I have notes of sixty-eight cases of delirium tremens occurring, during the last ten years, in hospital and private practice. Of these but four have died. One woman threw herself from a window; one man died from intercurrent pneumonia; a woman, a patient of Dr. Papen, of Albany, died from the effects of self-mutilation; one man died, I believe, from the effects of chloral.

ABSTRACTA.

In Delirium Tremens, nourishment is insisted on as of most importance by Dr. Atkinson in the *Practitioner*. Sedatives are useless unless the anæmic brain is supplied with nourishment, lack of which causes want of sleep. The quality of the blood should be improved as rapidly as possible by easily digested food frequently supplied. Cutting off all stimulants, order liquid essence of beef alternately every two hours with half a pint of milk. Chloral may be given every four hours, but will have no effect until the brain takes up some of the nourishment. Strong liquid food must be continued for several days. After ten or twelve hours of continuous sleep have been secured the chloral had better be discontinued and compound tincture of gentian, with tincture of nux vomica, given three times a day.

DUPUYTREN employed small enemata, containing from six to ten drops of laudanum, in delirium tremens. If the first injection is rejected, a second and third may be required. If the calm is incomplete, an injection is given every six hours. The rectum absorbs and does not digest the medicine, which passes, therefore, more directly to its destination. Six drops of laudanum, in an injection, take more effect than fifteen drops given by the mouth; large quantities of opium are often swallowed by alcoholic patients without producing sleep. Besides, it is often difficult to get the subject of delirium tremens to swallow.—*Echo Med. et Pharm. Belg.*

ZINC OXIDE is advised in acute and chronic alcoholism by Waring-Curan and Marcet; zinc acetate is ranked next to opium by Hermann.

STRYCHNIA AN ANTIDOTE TO ALCOHOLISM.—Dr. H. C. Morey reported the case of a man who takes large quantities of strychnia to remove the effects of a debauch. The amount taken corresponds with the amount of whiskey consumed. For fourteen years the case had been under the doctor's observation. The man was often drunk, and as often rendered sober in an hour by strychnia.—*Edinburgh Med. Jour.*

THE ulterior effects of alcohol are not mitigated by giving strychnine at the same time. But a person who has taken alcohol enough to be drunk under ordinary circumstances will not show its effects, if under the effects of strychnine also.—*Lancet.*

NICOTINE INTOXICATION (Galezowski, in *Recueil d' Ophthalmia*) causes simple paleness of the papilla, due to spasm of the blood vessels. But if the disease continues, degeneration of the optic nerve fibres occurs and atrophy of the papilla. Symptoms of nicotine amblyopia: Myosis, central scotoma, sometimes extending to the periphery and amounting to complete blindness, more or less prolonged, and chromatic phenomena.—*N. Y. Med. Jour.*

NICOTINE AND ALCOHOL ANTIDOTAL TO STRYCHNIA.—Professor Haughton, of Dublin, relates a case of strychnia poisoning which was treated by drop doses of nicotine in whiskey punch every half hour. At the second dose the paroxysms became less violent and the muscles of the abdomen softer.

TOBACCO AS A SEDATIVE.—Cerebro-spinal meningitis is reported cured by excessive smoking in a previous non-smoker;

and other cases, by alternate five-drop, hourly doses of tincture of gelsemium and tincture of calabar-bean, continued until relaxation of the spasmodic muscular constriction ensued.

In these instances, the three special sedatives, tobacco, gelsemium and calabar-bean figure in the same *rôle*. Calabar-bean has a peculiar depressing action on the spinal cord. The use of sedatives in the spasmodic stage of cerebro-spinal meningitis does not necessarily conflict with the use of quinia and other stimulants in preceding or following stages.

Tobacco, gelsemium and calabar-bean have been also prescribed for the spasms of tetanus and of strychnia poisoning. Tobacco appears to be a ready and efficient antidote to strychnia. *Per contra*, strychnia and quinia may be experimentally held as antidotes to the poisonous effects of tobacco, gelsemium and calabar-bean.—*Ex.*

Chloral as a Purgative.—In the *Gazetta Medica Italiana, Provincie Venete*, Dr. Bonatti speaks highly of the use of hydrate of chloral, in doses of thirty to forty-five grains, in a draught of senna, as a purgative in obstinate constipation of the insane, after croton oil and other cathartics had been used without avail.—*New York Medical Journal.*

Chloral Hydrate in Dysentery.—Dr. Curci has good results from chloral in typhoid diarrhœa and dysentery. In dysentery the chloral is combined with chlorate of potassium. It may be given with barley gruel by the mouth or in clysters. Before administration by the mouth a light purge should be given. Chloral is not only narcotic, but also sedative, astringent, anti-diarrheic, coagulant, and hence, antiseptic. It calms the cerebro-spinal centres, as well as the sympathetic, which latter, above all, is affected in dysentery. By reason of the sedative influence of the remedy over the sympathetic, the peristaltic action of the intestines is diminished, after being temporarily increased, and pain disappears.

Perfectly Tasteless Quinine.—Sixty grains sulphate of quinine, fifteen grains tannic acid and three ounces syrup of tolu are reported to form a mixture perfectly tasteless as regards the quinine. We do not vouch for it.

Cinchonine and Cinchonidine produce convulsions; quinidine has a similar, but milder, property, which is totally absent in pure quinine. Quinidine, therefore, is intermediate between

quinine and the alkaloids mentioned, with closer relations to the latter.—*M. Laborde, in Brit. Med. Jour.*

KAIRINE AND KAIROLINE (Prof. W. Filehne in *Berl. Klin. Wochenscher*).—Quinine is a derivative of chinoline. The large proportion of hydrogen in quinine led chemists to regard the quinine molecule as based on a *hydrated* chinoline. Dr. Otto Fischer, lecturer on chemistry in the University of Munich, and Dr. Konigs endeavored to obtain, by synthesis, other bodies having the antithermic properties of quinine. By hydration and oxidation processes, by the addition of methyl or methoxyl groups to the hydrated chinoline molecule, an extensive series of bodies, since the beginning of 1881, have been found whose N-atom, besides its connection with two atoms of carbon in the chinoline formula, is united to the carbon of a methyl group or of another alcohol radical. One of these bodies is the oxychinolinmethyl-hydride of Fischer, named shortly *kairine* [Kairine M.]. Its formula is $C_{10}H_{12}NO$, that of chinolin being C_9H_7N.

When it had been recognized that the essential element in the process was the addition of methyl to the N-atom in the hydrated chinoline, the chinolinmethyl hydride (*kairoline*) of Konigs and Hoffman, and the chinolinethyl-hydride [Kairine E.] of Wischnegradsky, were tried and also found to have antipyretic properties. Kairoline is built up in precisely the same way as kairine, except that one atom of hydrogen is replaced by HO. These last mentioned are volatile, costly and have an unpleasant taste; they have not been so fully tried as kairine.

The *hydrochlorate of kairine* is a clear, crystalline, greyish-yellow powder, readily soluble in water and having a salt-bitter, aromatic taste; it may be given in capsules. Water should be drunk freely after the powder. This substance has been tried in acute and chronic febrile diseases (typhoid fever, acute articular rheumatism, septicæmia, tuberculosis, acute pneumonia), and its antithermic action found to be constant.

In *healthy* adults doses of 1–1·5 gram have no physiological action. In debilitated subjects the dose of 1 gram every two hours is not to be exceeded, otherwise cyanosis may occur. In adult fever cases the most suitable dose is 0·3–0·5 gram every hour or hour and a half. The interval between doses of 1 gram should not exceed two and a half hours; between doses of 0·5 gram it should never be more than one and a half or two hours. The effect of 1 gram dose lasts no longer than three hours, that

of 0·5 gram no longer than two and a quarter hours; and when the influence of the drug is exhausted the temperature again rises, accompanied by a feeling of chilliness. A dose of less than 0·3 gram has no effect. A dose of 0·3 to 1 gram lowers the temperature by ½ to 2°C.; if another dose be given before the action of the former dose is over, the temperature falls still farther; and if 0·5 gram is given hourly, after the fourth dose (sometimes after the second) the temperature falls to the normal or below. Lower than 37°–36·5°C. (98·6–97·7°F.) the temperature cannot be brought. The action of the drug begins about twenty-five minutes after the dose of 0·5–1 gram is taken by the mouth; hypodermic and rectal injections were not tried. The fall in temperature is more rapid the larger the dose. It is always accompanied by profuse sweating so long as the temperature continues to fall. When the temperature has reached its lowest point in the individual case (it is possible, by small doses frequently repeated, to bring the temperature, say from 40°C. to a constant level of 39° or 38·5°C.), that is usually after 2–4 doses have been given, the sweating ceases, and the temperature remains at its new level without further sweating — so long as the administration of the kairine is continued. These facts and the absence of sweating when the drug is given to healthy individuals shows that the fall in temperature is not secondary to the sweating, but that the latter occurs because the organism, so influenced by the medicine as to demand a lower temperature, endeavors to free itself from the febrile excess of heat by a "critical" sweat; as soon, therefore, as the required temperature is reached the sweating ceases. Even during the continuance of the sweating, but especially after this has ceased and the effects of the lowered temperature are manifest, the patients feel much more comfortable; this is especially the case in croupous pneumonia, As soon as the medicine is withdrawn, that is, two to three and a half hours after the last dose (according to the amount taken each time), shivering occurs, and the temperature rises to the point corresponding to the acuteness of the disease. At night 1·5–2 grams of *kairoline* may be given, instead of kairine, to keep the temperature down for six hours. Or, as the lower the point to which the temperature has to rise, the milder the rigor, medication may be omitted after midnight, and thus the rigor and rise of temperature will come in the morning, when remission of temperature is due. Or, by lessening of the

evening doses of kairine the temperature may be allowed to rise gradually; thus, at 8 P. M. 0·5 gram, and at nine, ten, eleven and twelve, 0·25 gram; then the smaller the ultimate rise the less marked the shivering.

Kairine may be given in malarial affections, 1 gram hourly for three hours before the expected attacks.

During the use of kairine, and also of the other two bodies mentioned, the urine becomes dark-green, but contains no sugar nor albumen.

Kairoline and chinolinethyl-hydride are identical in action. Single doses, such as would be given of kairine (0·3–1 gram), have no effect, nor has a dose of 0·5 gram hourly. But a dose of 1·5–2 grams produces decided effect, more slowly developed, but lasting about six hours. Sweating is less marked than with kairine; shivering on subsequent rise in temperature is very slight. These drugs are useful for evening administration, but they are rarely pure, deliquescent and unpleasant in taste.

The difference in the action of kairine and kairoline may be accounted for in this way: All hydroxyl derivatives, not only of chinoline, but also of benzol, are more oxidizable than the corresponding bodies free of oxygen. Thus the quicker and slighter action of kairine, a hydroxyl body, may be explained, as the whole quantity taken comes into operation on the system immediately. On the other hand, it is conceivable that it is more quickly used up than the more resistent kairoline, which yields only gradually to the oxidizing influences of the organism. —*The Quinologist.*

The New York Medical Journal calls attention to the common error of spelling the artificial *alkaloid*, kairine, without the final *e*—a termination which should be given to the names of all alkaloids.

Kairine.—L. V. Hoffer (*Med. Wochenscrift*) obtains different clinical results from those of Filehne. The effect of kairine is not always the same (antipyretic) in different cases, nor even in one and the same case. Filehne's euphory was never seen; on the contrary, great sudation, rigors alternating with burning sensations in the nose, and headaches. The temperature, if lowered by a dose, soon rises, so that no reliance can be placed upon changes of temperature. Rigors occurred even while the temperature was quite high and while kairine was given in large

doses. Transpiration was present during the whole process, not merely on decrease of temperature.

Kairine seems to be a dangerous remedy in tuberculous patients, for the perspiration, rigors and faintness may invite collapse. Cyanosis was seen in a tuberculous patient after one dose. In anæmic individuals it should be given with great caution.—*St. Louis Med. and Surg. Journal.*

Salicylic Acid vs. Kairine.—L. Riess, Berlin (*Ber. Klin. Woch.*): Salicylic acid is superior in energy and continuity. Often in typhus one ample dose of sod. salic., perhaps with a bath or two, will keep the temperature below 39° for twenty-four hours—an effect equal to that of three or four full doses of kairine, and the chills and excessive sweats of kairine are avoided. In an epidemic of recurrent fever in Berlin, relapses have been cut off by prophylactic doses of salycilic acid more efficiently than Freymuth and Poelchen have attributed to kairine. —*St. Louis Druggist.*

Muriate of Quinia and Urea (U. S. Disp.), Hypodermatically, in Intermittents.—At the German Hospital, Dr. J. Solis Cohen, at the suggestion of Dr. Aug. Stabler, resident physician, gave instructions to employ the above remedy. Striking results in two instances confirm the encomium of Prof. Bartholow.

Case. I.—Admitted November 23. The first chill occurred August 23. Chills recurred despite the administration of quinine, which always produced unpleasant sensations. From October 12 to November 7 the chills had "nearly ceased;" but from November 7 they had recurred every day. The man was found to have an enormous liver and a slightly enlarged spleen. He was chilly at the time of examination, temperature 105°, pulse 116. During the fever stage, ten grains of bimuriate of quinia and urea, dissolved in twenty minims of distilled water, were injected hyperdomatically at 2.45 P. M. The patient immediately sank into a sound sleep; was aroused at 5.30 to receive a second injection of ten grains. He felt well and had an appetite. He slept that night and awoke without fever or headache. He remained in the hospital until the seventh day, without return of malarial phenomena. On the third day he was given dilute nitro-muriatic acid, ten drops, in water, three times a day, until his discharge, and bathed daily over the hypogastrium with a solution of the same acid, one drachm to the quart. Retrogression in the volume of the liver ensued.

CASE II.—Admitted November 7. Had chills daily for two weeks. Put to bed at 11.30 A. M., shaking. Temperature 104.6°. Injection of ten grains bimuriate of quinia and urea. Cold stage ceased within five minutes. 12.30 P. M., comfortable, temperature 105°. Sweating began 2 P. M., with a temperature of 102.8°; 4 P. M., temperature 100.9°; ten grains injected hypodermatically. 5 P. M., temperature 99.8°. No cerebral manifestations. Next morning temperature normal. On night of second day a powder of calomel, ipecac and sodium bicarbonate was administered, as a purge, followed in the morning by liquor magnesii citratis, producing free evacuations. No further medication of any kind. Appetite returned the day after the injection. Anæmia rapidly disappeared.—*Polyclinic.*

DETECTION OF BACILLUS TUBERCULOSIS.—Dr. M. B. Cartzell adds an easy method to the many staining processes now in use. A small quantity of sputum is thinly spread on a glass slide; it dries in a minute or two, and then is passed slowly through an alcohol flame several times. A drop or two of Gradle's fuchsin solution (carbolic acid, mxv; distilled water, fl ʒ ss; dissolve and add saturated alcoholic solution of fuchsin, fl ʒ ss) is placed on the sputum for from three to five minutes. The slide is now washed with distilled water to remove excess of fuchsin, and the sputum is decolorized by sat. sol. of oxalic acid. It is again thoroughly washed in distilled water and allowed to dry; it is now ready to be mounted in glycerine or balsam. With a power of 500 diameters the bacilli appear as brilliant red rods, without staining the background. Nitric acid, employed in most other methods as a decolorizer, is apt to remove the color from the bacilli.—*Phil. Med. Times.*

TUBERCLE BACILLUS DEMONSTRATED WITHOUT NITRIC ACID. GIBBES.—Take of rosanilin hydrochloride two grammes, methyl beni one gramme, rub them up in a glass mortar. Then dissolve aniline oil, 3 c.c. in rectified spirit, 15 c.c.; add the spirit slowly to the stains until all is dissolved, then slowly add distilled water, 15 c.c.; keep in a stoppered bottle. To use the stain, the sputum having been dried on the cover glass in the usual manner, a few drops of the stain are poured into a test-tube and warmed; as soon as steam rises pour into a watch-glass and place the cover glass on the stain; allow it to remain for four or five minutes, then wash in methylated spirit until no more color comes away;

drain thoroughly and dry either in the air or over a spirit-lamp. Mount in Canada balsam. The whole process, after the sputum is dried, need not take more than six or seven minutes. This process is also valuable for sections of tissue containing bacilli. —*Lancet.*

TONGALINE.—Having a case of neuralgia recently which did not improve under the ordinary treatment, we gave our patient Tongaline. It acted admirably, relieving the pain before many doses had been taken. Since then we have had occasion to prescribe it again, and with the same good results. We believe Tongaline is destined to become *the remedy* in neuralgia.—*Eastern Medical Journal.*

AVENA SATIVA, three to fifteen drops of B. Keith's tincture, every two or three hours, relieves the nervous prostration of acute alcoholism, approaching to delirium tremens. Severer cases require hypodermics of morphine. The same doses of avena sativa, given three times a day, have cured several mild cases of opium habit.—*Charles E. Jones, M.D., Albany.*

DIPSOMANIA CURED BY AVENA. Dr. Kock, Rochester, N. Y. (*Med. Chirurg. Correspondenz—Blatt*, No. 9).—An artizan, aged 40, for many years a drinker, overcame the habit for five months by five drops of tincture avena three times daily. When medication ceased, a week's spree occurred; on retaking the avena he was sober for a year.—*Weekly Med. Review.*

CURRENT LITERATURE.

International Review of Medical and Surgical Technics. Official organ of the American Association of the Red Cross Boston Mass.

This quarterly is devoted to the discussion of instruments, appliances and methods of operation, to directions for the manufacture, use, care and repair of instruments, and for make-shifts and expedients in emergencies. Reports of the history and uses of drugs will not be published, but new devices for preparing and administering drugs will be noticed.

Twenty-six of the 130 octavo pages of the first number are occupied with the history of the American National Association of the Red Cross, which owes its existence to Miss Clara Barton,

an active member of our war-time Sanitary Commission. An international conference was held in Geneva, Switzerland, in 1863, at which a treaty was framed, which twenty-five governments have signed. The treaty provides for the neutrality of all sanitary supplies, surgeons, attendants, sick or wounded men, and their safe conduct when they bear the sign of the organization, viz., the Red Cross.

The Red Cross emblem was chosen out of compliment to the Swiss republic, where the first convention was held. The Swiss colors are a white cross on a red ground; the badge chosen is these colors reversed.

The United States gave its adhesion to this Geneva treaty, through President Arthur, in March, 1882.

A correspondent of the *New York Medical Journal* says that the Red Cross Association is working in St. Louis to procure a hospital car, supplied with cots, remedies and appliances, for railway accidents.

PAMPHLETS.

"Annual Report of the Supervising Surgeon-General of the Marine-Hospital Service of the United States for 1883." 406 pages, octavo.

"Proceedings of the Naval Medical Society, Washington, D. C."

"School Hygiene." By C. J. Lundy, A.M., M.D., Professor of Diseases of the Eye, Ear and Throat in the Michigan College of Medicine. Read before the Detroit American Health Association.

"Annual Address before the American Academy of Medicine," at New York, October, 1883. By President H. O. Marcy, A.M., M.D.

"Appeal of the International Institute for Preserving and Perfecting Weights and Measures." Cleveland, Ohio.

"The Reciprocal Attitude of the Medical Profession and the Community." The Anniversary Address before the Medical Society of the State of New York, delivered at Albany, February 6, 1884, by Alexander Hutchins, A.M., M.D., Brooklyn, N. Y., President of the Society.

"Woman's Work in the Field of Medicine." College of Midwifery, Seventh avenue, New York city.

"Dorcas Magazine of Knitting and Crochet." By Marie Henderson. Published by Styles & Cross, New York. Monthly, $1.00 a year; octavo, 32 pages.

"Annual Report of the Board of Managers of the New York State Reformatory, at Elmira, for 1883."

MEDICAL SOCIETIES.

THE SCHENECTADY COUNTY MEDICAL SOCIETY held its annual meeting on Tuesday, January 8, 1884, at the Carley House. The following officers were elected for the ensuing year: President, Dr. H. C. Van Zandt; vice-president, Dr. H. V. Hull; treasurer, Dr. C. C. Duryea; censors, Drs. Schoolcraft, Clute, Vedder and Pearson. Drs. Van Zandt and McDonald were appointed a committee on legislation, and instructed to press legislative action in favor of the Erie county bill, providing for an examining board to pass upon the qualifications of all new graduates before they shall be entitled to practice. After discussion of other topics, the society adjourned until the semi-annual meeting, on the second Tuesday of June.

THE NEW YORK COUNTY MEDICAL ASSOCIATION, Dr. William Detmold, president, Dr. E. A. Judson, secretary, has been organized as a consequence of the recent action of the Medical Society of the County of New York, and the New York Academy of Medicine, on matters connected with the ethical controversy.

THE NEW YORK STATE MEDICAL ASSOCIATION was organized on the morning of Wednesday, February 6, by sixty-five members of the Medical Society of the State of New York, for the purpose of maintaining the national or old code of medical ethics. Officers elected: President, Dr. H. D. Didama, Syracuse; secretary, Dr. E. D. Ferguson, Troy; treasurer, Dr. J. H. Hinton, New York, and a council of sixteen members. On motion of Dr. Austin Flint, Jr., the first annual session was appointed to be held on the third Tuesday (18th) of November, 1884, in New York city.

This is a volunteer association, and does not possess the legal status of the Medical Society of the State of New York, which was organized pursuant to legislative enactment.

OBITUARY.

Dr. ELISHA HARRIS, Secretary of the State Board of Health, the affable and courteous gentleman whose gray hairs and dignified presence have often graced our County Society meetings,

and whose recent words still linger in our minds, has ceased from his labors.

Two years ago he was seriously sick with peritonitis, and on Friday evening, January 25, of this year, he was suddenly attacked with a recurrence of the same disease, which terminated fatally at about half-past four o'clock on the morning of Thursday, January 31.

Dr. Elisha Harris was born at Westminster, Vt., March 4, 1824. In 1837 he became a student at Homer, N. Y., under Dr. S. B. Woolworth, the late secretary of the Board of Regents. During ten years, spent in teaching, study, and farming with his father, he pursued the study of medicine, and graduated at the College of Physicians and Surgeons, New York city, in 1849. He received the honorary degree of A.M. from La Fayette College, Easton, Pa. In 1849 he married a daughter of Josiah B. Andrews, D.D., of New York city, and settled there for the practice of his profession. His public career began in 1855, when he was appointed superintendent of physicians of the hospitals at Quarantine on Staten Island. While at Quarantine he devised the "floating hospital" and made a thorough reform in the quarantine system, which resulted in the organization of the present efficient service.

Dr. Harris, with Henry C. Bellows, D.D., and others, proposed the Sanitary Commission, and he served as commissioner throughout the war. He invented and put in operation the ambulance car, for which he was awarded a bronze medal at the Exposition Universelle, in Paris, 1867, and a silver medal by the Societè des Secours aux Blesses. At the close of the war he edited the very important and voluminous work, "Sanitary Memoirs of the War." From 1866 to 1876 he gave his energies to the organization of the Metropolitan Board of Health and the system of registration of vital statistics. As the result of his sanitary survey of New York city, in 1869, over fifty thousand windows for ventilation were put in dark bedrooms of tenement houses. By his efforts the system of public vaccination was first started in 1869, and about fifty physicians vaccinated over fifty thousand persons in that year. He was for several years the secretary and later the president of the American Public Health Association. In 1880 he was appointed by the Governor one of the three state Commissioners of Health, and on the re-organization of the State Board of Health, May, 1880, was elected its secre-

tary and Superintendent of the Bureau of Vital Statistics, which position he held at the time of his death, and in less than four years has accomplished almost incredible results.

He has contributed many valuable papers to the literature of sanitary medicine.

Dr. Harris was a philanthropist, and did Christian work among the convicts and poor of the state institutions. In his private life he had suffered the loss of almost all of his near relatives; his wife died in 1867, leaving no children; his sister, now surviving him, is in Mexico, in delicate health.

Since his residence in Albany he has lived at the Delavan House. The funeral services took place at the Cathedral of All Saints, on Friday, February 1. The Governor ordered the flags at half-mast on all state buildings.

ASSOCIATION OF THE ALUMNI OF THE ALBANY MEDICAL COLLEGE.

The approaching annual meeting of the Association, to be held Wednesday, March 5, promises to be largely attended and of general interest. The Executive Committee have completed most of the arrangements for the memorial exercises, which will occupy a considerable portion of the time of the meeting. Dr. David Murray, secretary of the Board of Regents, will deliver an address commemorative of the life of Dr. Mosher as an educator, while St. Clair McKelway, Esq., will speak of him as a citizen, and Professor Samuel B. Ward, M.D., as a physician.

The address of welcome to the alumni at the opening of the meeting will be delivered by Professor Maurice Perkins, and the exercises, as a whole, promise to be of more than usual, though in part of a melancholy, interest.

The customary reception will be held in the library during the morning of Alumni Day, and the eleventh annual dinner of the Association will be given at the Delavan House, in the evening, after the commencement exercises of the College, at Music Hall, are concluded.

It is hoped that the attendance may be large, and graduates of the College are urged to make such arrangements as may be necessary to enable them to be present. W. G. T.

THE MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

F. C. CURTIS, M.D., A. VAN DERVEER, M.D., LORENZO HALE, M.D.,
JNO. BEN. STONEHOUSE, M.D., WILLIS G. TUCKER, M.D.

VOL. V. FEBRUARY, 1884. No. 2.

THE CODE CONTROVERSY FINISHED.

The Medical Society of the State of New York met in Albany on February 5, 6 and 7, and on the evening of Tuesday, February 5, after opportunity for full argument and expression of opinion, permanently settled the code controversy.

The old code advocates feel that they have been unfairly dealt with in this contest. They are answered that a year's notice was given in 1881, and a fair discussion occupied a long Tuesday evening in 1882.

Again, it is said that the State Society does not represent the state sentiment, This charge might be true if the society was a self-propagating body; it would then truly be ruled by a clique, or rather it would be nothing but a clique. But this charge cannot lay against a society whose delegates, fresh from the recent sentiment of local societies, are elected by republican methods in different counties; and whose delegates number at every meeting nearly as many as, and often more than, the permanent members in attendance; and whose permanent members are chosen only from the lists designated by county societies.

Is it in the realm of human possibility to reach a higher degree of approximate representation of the profession of the state? Has a single county been heard from, with a complaint that it is not fairly represented in the State Society?

Another protest of the old-codists is that the votes of 1883 (old code 99, new code 105) and of 1884 (old code 105, new code 124) show that there are *not* two-thirds of the society in favor of the new code. The new-codists claim that the thing which these votes do prove is that there are not two-thirds of the society who desire the *old* code.

As no notice of further action was introduced from either party, we suppose that the first Tuesday evening in February, 1885, will be occupied with a review of some modification of the "State Examiners" bill favored by Drs. Loomis and Drake, of New York, or of the Erie County "Buffalo Bill," as facetiously dubbed by Dr. Piffard. L. H.

——Dr. John B. Chapin, superintendent of the Willard Asylum for the Insane, has been offered the superintendency of the Pennsylvania Hospital for Insane, in place of the celebrated Dr. Kirkbride.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.

Abstract of the Minutes of the Stated Meetings of October 24, November 21 and December 26, 1883, and January 30, 1884.

A regular meeting of the Medical Society of the County of Albany was held in Alumni Hall, October 24, 1883, at 8.30 P. M.

President Herman Bendell in the chair.

Present: Drs. T. P. Bailey, Ball, Bartlett, Boyd, D. C. Case, H. S. Case, R. D. Clark, Classen, Cook, Curtis, DuBois, J. D. Featherstonhaugh, Fleischman, J. E. Hall, Hays, H. Hun, M. J. Lewi, Lyon, Mann, March, Merrill, H. Miller, Moore, Morrow, S. Peters, Riley, R. H. Sabin, Snow, Thompson, Trego, Van Derveer, Woodward—33.

President Bendell, in a few well chosen words, returned his thanks to the society for the honor conferred upon him by electing him President.

Dr. F. C. Curtis, from the special committee to whom was referred the recommendations in the address of the retiring President, Dr. Snow, reported the following:

In the address of President Snow, delivered at the recent annual meeting of the Society, certain propositions were presented and recommended which were thought to promise an improvement in the Society's meetings, and to bring them before the Society they were referred to a committee to report upon at this meeting.

We have taken much interest in the consideration of this matter of the condition of the Society, and of medical affairs here, and the remedies for evils that appear to exist, that are recommended with much wisdom, as it seems to us, by the President. It would be interesting to trace out, if possible, the causes for decline of interest in the meetings of the Society. That they are not as well attended as they were some years ago is evident to those of us who have followed them with any degree of faithfulness during the last ten years. Until within a few years a good numbers were usually present, and papers that were presented met with very interesting discussion. Going back to the time when we met in the old City Hall, the recollection is of good numbers and hearty interest. Why they have not continued to be, and how to restore conditions then existing, or new ones, if the old are irrevocable, that shall give the meetings fresh zest, is the ques-

tion. To this your committee have applied themselves. That it is an important question to the profession of Albany is not hard to maintain.

FUNCTIONS OF A COUNTY MEDICAL SOCIETY.

It is obvious from the nature of the case, as well as from observation here and elsewhere, that the local guild of physicians should have frequent and full meetings. There is need of it for the sake of concert of action and concert of thought. On many things pertaining to affairs in common among them they should have a community of sentiment—or at least a sentiment that is the outcome, whether agreed or not, of frequent consultation. Such questions as relate to hygienic affairs or other matters of general public interest affecting medicine should be so generally talked about that there should be exhibited a current of thought and common idea about it by every member of the profession, except the few slow, uninformed ones who are always to be found outside of such general flow of events. The community should understand that the doctors have talked matters over among themselves. On all these things there ought to be intelligent discussion. We very well know that every season brings novelties in the phase of disease or predominance of one or another about which much is to be learned by comparison of observation and experience. Then, regarding the outbreaks of preventable diseases there ought to be applied the force of common action. Besides this, the society ought to apply itself to the study of scientific matters of local and professional importance in connection with our occupation. All have not the same gifts; some are expert in one thing, some in another. At least, every one can be a collector of facts observed, and the orderly arrangement of these and the study of them by modern appliances constitute the contributions to science. We have those among us who understand the use of the microscope, or botany, or geology, or pathology, or the various intimate and collateral sciences so well as to make it possible to throw light on any subject.

Then, the Society ought to be a studio club, as it were, where we can learn from each other. Some are interested in the study of one branch of medicine, others of another. Reading and observation are mostly in their lines, other subjects being, for the most part, passed over. Nevertheless, there is a desire for information, and in this busy time of the world of science one quickly falls out of the current of progressive information unless some such means as the Society best offers are used to keep up. We are sure that if we had active committees on pathology, therapeutics and new drugs, microscopy, hygienic affairs, chemical analysis, and the like, as well as one to keep note of and report upon general medical news and contributions to medicine, and other subjects that might readily suggest themselves, we should find those who failed to attend and gather in what was presented at the meetings, quickly falling behind in information, almost insensibly accumulated by the regular attendants.

Then, there are questions of professional polity on which interchange of views should be had and on which this large body ought to make an important impression, although the meetings ought to be, for the most part, as they are intended to be, for scientific study.

Besides this, there ought to be a social good-fellowship among the members of our guild. They ought to have a place of regular meeting where they can come in contact with each other personally. Having much in common and much that no one else is interested in, we ought to meet and keep up interest in each other as individuals A trysting place is a good thing, and provision for it is contained in the propositions made by the President.

For these and various reasons, regular and well-attended meetings of this society are desirable. There is no doubt that of all societies into which the profession have gathered themselves none exceeds in possibilities the local county society. It can really be far the most effective of good. The State Society meets infrequently and deals with a limited class of large subjects; but this is the family circle of the profession, and does the home work.

Looking over the various local societies here, none seems to offer the advantages of the old, organized, incorporated, democratic county society. It is open to all reputable physicians; it has no exclusiveness; it deals with no side issue nor clique; it has all the machinery and resources that any society can have. It has, too, the advantage of age, of known position, of history and traditions, of associations with important events and with men of prominence and worth through its history. Just what it is every one knows — it needs no introduction.

One of the principal things from which it has suffered has been the existence of several other societies. Some of us have always deprecated this; for, while doubtless admirable in themselves in many ways, they have tapped the County Society at every point. There is no need of more than one society — only one can be well supported. The principal one of these has just voted itself out of existence, and it is to be hoped that all will subside and throw all their resources into this one. Only one society can be well supported.

THE COMMITTEE RECOMMEND

That meetings be held, as proposed in the address, once a month, instead of twice, and that, also, the social feature of recess and a slight collation be resumed, as it was some years ago. The present executive officers favor this, and it will be given a trial this year.

The proposition that the next and subsequently elected delegates to the State Society be required to pay the Society's dues to that society is also recommended, and a motion to that effect will be offered. The position is sought after and is desirable, as it is the only way to the honor of membership in the large society. In fact, during delegacy one is an actual member of that body. It is but fair that the dues should be paid by those who hold the position, especially as it is no more than each would have to pay yearly if a permanent member. The Society cannot, however, absolve its responsibility to the State Society for the annual payment, and the requirement should be that they pay each annually their quota to our Treasurer, whom we should authorize to collect it. There is no unfairness in placing this upon those to be elected hereafter, beginning next fall, when we elect new delegates.

The final proposition, that a standing committtee to be known as a Business or Executive Committee be appointed, appears to be of possible advantage and worth a trial. They might assist the President and Secretary in collection of material and contributions for the meetings. We would recommend the appointment, if the President sees fit, of three members, who, with the President and Secretary shall constitute such a committee.

The following resolutions are submitted by the committee to carry out their report:

Resolved, That each delegate from this Society to the State Society who may be hereafter elected be required to pay to the Treasurer of this Society, annually, during his term of service, the sum of five dollars, which the Treasurer is hereby authorized and directed to collect before the first of February of each year, and to use for the payment of the yearly dues to the State Society.

Resolved, That this resolution be hereafter printed upon the notices of each annual meeting at which delegates are elected, and that copies be served upon all delegates hereafter elected, and that, on failure to comply with this resolution, after due notice, a substitute shall be elected at the next annual meeting to fill their term of service.

Resolved, That a standing committee to be known as the Business Committee be formed, to consist of the President, Secretary and three other members to be appointed by the President, whose duty it shall be to provide material for the intervening regular meetings and such other work relating to these meetings as the President may see fit to lay before them.

Upon motion of Dr. Van Derveer the report was accepted, and the resolutions offered were adopted.

The President announced the following committees:

On Hygiene and its Relations to the Public—F. C. Curtis, Lorenzo Hale, D. V. O'Leary, J. B. Stonehouse, J. U. Haynes, A. B. Huested, J. Thompson.

On Registration—T. K. Perry, H. March, T. Helme, E. A. Bartlett.

On Pathology—W. Hailes, Jr., A. Van Derveer, S. B. Ward, J. W. Moore, H. Hun, S. R. Morrow, G. S. Munson, D. H. Cook, F. L. Classen.

Dr. J. P. BOYD then read a paper on

PLACENTA PRÆVIA.—DISCUSSION.

[Paper published in the MEDICAL ANNALS, October, 1883, page 217.]

Dr. N. L. SNOW suggested that it was interesting to consider the matter of heredity and predisposition in these cases. He asked if placenta prævia had occurred in any of these women before.

Answer: In one, yes; in the others, not known.

Dr. A. VAN DERVEER said: Flooding in the sixth or seventh month is apt to be alarming. In these cases he considered gradual dilatation to be not so successful as prompt delivery. If necessary, sponge tents, or some of the many forms of dilators may be used, but only to further prompt delivery. He cited the case of a woman in whom placenta prævia had occurred twice before; he was called at midnight, dressed rapidly and reported quickly, but, when seen, the woman had died from profuse hemorrhage. The lesson to be learned was—deliver immediately if hemorrhage is profuse. In regard to the pathology of placenta prævia, he inclined to the old theory, that of the gradual loosening of the placenta, with shortening of the neck.

Dr. M. J. LEWI enquired what was the general opinion in regard to rupturing the placenta and passing the hand for immediate delivery.

Dr. S. PETERS said he recalled a case which perhaps might in part answer the query. It was a case of placenta centralis. He perforated the placenta and delivered according to Simpson. This was the first and last time, however, he ever performed the operation. He believed we should save all the placenta we can, separate small portions at a time, and endeavor to save the child. Immediate delivery was to him something new; he believed in quiet for the woman, in the hope that she would go on to full term and the child be strengthened. He had never seen a woman die with placenta prævia. If delivery became necessary, it was his practice to turn; he had never performed cephalic version. He held the old theory in regard to pathology; the examination of the placenta, which shows small portions detached, seems to prove this theory.

Dr. D. C. CASE enquired if Dr. Boyd was certain that the placenta, in all these cases, was not detached, and so dropped down. He then cited a case of supposed placenta prævia in which traction on cord brought away the placenta, after which a dead fœtus was delivered.

Dr. BOYD, in answer, said that in all his cases the attachments were very marked. He asked if the placenta referred to by Dr. Case was yellow.

Answer: No, it was the color of tow.

Dr. R. D. CLARK had had a case of placenta prævia in which he delivered through the placenta.

Dr. J. D. FEATHERSTONHAUGH was surprised to have heard no more said in regard to post-partum hemorrhage. In three cases he had seen, this proved a most troublesome feature.

Dr. D. H. COOK had seen several cases; in one the woman was exsanguinated; mechanical interference did not seem advisable; he tamponed the vagina. In the evening the attending physician sent for him, saying that the woman had fainted; upon his arrival he delivered at once, but the woman died. In another case, prompt delivery, with subsequent use of ergot, brought a good result.

A paper entitled "Six Cases of Delirium Tremens, Treated with Half-ounce Doses of Tincture of Digitalis" was then read by Dr. H. Hun. (See page 33.)

Discussed by Drs. M. J. Lewi, F. C. Curtis, A. Van Derveer, S. Peters, D. C. Case, D. H. Cook, J. W. Moore and R. D. Clark.

Adjourned.

Regular meeting, November 21, 1883, at 8 30 P. M.

President HERMAN BENDELL in the chair.

Present: Drs. T. P. Bailey, Ball, Bartlett, Boyd, D. C. Case, H. S. Case, Classen, Cook, Crawford, Culver, Curtis, DuBois, J. D. Featherstonhaugh, Hall, Hays, M. J. Lewi, Lyon, Miller, Moore, Morrill, Morrow, Munson, T. W. Nellis, W. J. Nellis, Paine, Perry, Riley, Rouchel, Scattergood, Shanks, Snow, Thompson, Trego, Van Derveer, Woodward—36.

The minutes of the last meeting were read and approved.

Dr. CURTIS, for another, introduced the following:

Resolved, That the Business Committee be instructed to investigate the claim of Dr. Beckett for money paid by him in 1876 and 1877 on account of this Society, and report thereon at our next monthly meeting.

Adopted.

A Paper entitled "Some Points Connected with the Preventable Diseases, Especially with Reference to their Sanitary Relations," was read by Dr. F. C. Curtis.

Discussed by Drs. Elisha Harris, A. Van Derveer, H. Bendell and John Thompson. (See page 18)

Dr. VAN DERVEER exhibited samples of Kairine.

Adjourned.

Regular meeting, December 26, 1883.

Present: President H. Bendell and Drs. W. H. Bailey, Cook, Crawford, DuBois, Wm. Hailes, Lorenzo Hale, J. E. Hall, Mann, Mereness, Morrow, Munson, W. J. Nellis, Riley, Snow, B. U. Steenberg, Van Derveer, Van Vranken, Woodward—19.

Dr. MORROW was appointed Secretary *pro tem.*

The President referred to the death of Dr. J. B. Rossman, whose funeral took place this afternoon.

Dr. HAILES moved that a committee of three be appointed to draft resolutions relative to the death of Dr. Rossman. Carried.

The chair appointed as such committee Drs. W. H. Bailey, W. Hailes and Lorenzo Hale.

The committee retired, and on their return Dr. W. H. Bailey, after giving a biographical sketch of Dr. Rossman, reported the following from the committee:

WHEREAS, Infinite Wisdom has been pleased to remove by death our late respected brother, Dr. John Buskirk Rossman;

Resolved, That in his death we lose a venerable brother, society an exemplary and upright citizen and his family a beloved and cherished husband and father.

Resolved, That we feel deeply this dispensation of Divine Providence, and that we sympathize with his family and friends.

Resolved, That a copy of these resolutions be transmitted to the family of the deceased and spread on the minutes of this Society.

The resolutions were adopted by a rising vote.

Dr. GEO. S. MUNSON then read a paper on "Contagious Ophthalmia."

Dr. RILEY served as secretary during a temporary absence of Dr. Morrow.

The paper was discussed by Drs. Hailes, Mereness and Bendell.

Dr. B. U. STEENBERG next read a paper on "Rupture of the Lung without Rupture of the Chest Wall."

The paper was discussed by Drs. Cook, Bendell, Van Derveer and J. E. Hall.

Dr. VAN DERVEER called attention to the value of the "Index Medicus" and the need of increasing its subscription list. He moved that this Society subscribe for one copy for one year. Carried.

Dr. VAN DERVEER distributed copies of a "Memorial of the Medical Society of the County of Erie," asking co-operation in the effort to secure the passage of the proposed Act to establish the Medical Faculty of the State of New York.

Discussion followed, uniformly favorable to the bill.

Adjourned.

S. R. MORROW, M.D., *Secretary pro tem.*

A regular meeting was held in Alumni Hall, January 30, 1884.

The President, HERMAN BENDELL, called the meeting to order.

There were present: Drs. Bartlett, Ball, T. P. Bailey, Boyd, D. C. Case, Classen, Cook, Culver, Curtis, J. D. Featherstonhaugh, Freeman, Hall, Jos. Lewi, M. J. Lewi, March, Miller, Morrow, Murray, T. W. Nellis, W. J. Nellis, Thompson, G. L. Ullman, Van Derveer, Van Slyke, Ward, Woodward—27. Also Dr. Lilienthal.

Minutes of the last meeting were read and approved.

The Secretary read a communication from the "Special Commission on American Pork appointed by the President of the United States," having reference to trichiniasis and "meat poisoning."

Upon motion of Dr. Van Derveer the Secretary was instructed to request members of the Society to make notes of any cases of trichiniasis which have been under their notice and send the same to Dr. D.V. O'Leary, health officer, and also that the Secretary notify Dr. O'Leary of this action.

Dr. M. J. LEWI, chairman of the Committee on Legislation, asked further time before making a report on matters referred to them.

Dr. VAN DERVEER moved they be granted until Friday evening, February 1, and that a special meeting be called upon that date to consider their report. Carried.

Dr. S. H. FREEMAN moved that the regular order of business be suspended for the purpose of the presentation of a portrait to the Society. Carried.

Dr. FREEMAN made a few remarks, introducing to the Society Mr. Thos. W. Stevens, who, in presenting a life-size portrait in oil, 28x36 inches, framed in a massive gilt frame, of the late Jacob S. Mosher, M.D., a gift of ninety-one individuals, members of the Society and druggists, said:

Dr. Herman Bendell, President of the Medical Society County of Albany:

Dear Sir—Shortly after the death of Dr. Jacob S. Mosher it occurred to a number of physicians who had been intimately associated with the deceased that some lasting tribute to his memory should be placed in a conspicuous place where those who had known and loved him could obtain an occasional glance at his now silent, but ever cheerful, features. It was thought that the society of which you are the presiding officer should be the recipient of this gift, because of the fact that at your meetings the largest number of physicians were in the habit of gathering who knew him as an efficient member and an energetic President but a short time before his death. At the request of those who were foremost in the movement above mentioned, I have arranged and collected the subscriptions which have been proffered, and on behalf of the following named gentlemen have the honor and pleasure of presenting through you to the society of which you are the executive officer the accompanying testimonial of a portrait of your late distinguished President, Dr. Jacob S. Mosher, marking the reverence and devotion with which his colleagues endeavor to keep green the memory of one whose qualities of mind and heart made him one of the brightest ornaments in the profession which he graced by being a part of it. His noble face, as you remember it in his life, or as it looks down so benignantly from the canvas, shows his great character. The portrait was painted by Alexander Francois, an eminent French artist of this city, and is meritorious as a work of art aside from its value as a portrait.

President BENDELL, in accepting the portrait, said:

Mr. Stevens:

In accepting this portrait, permit me, on behalf of the Albany County Medical Society, to thank you for the successful accomplishment of your efforts in securing so excellent a picture of our late colleague and distinguished associate, Dr. Jacob S. Mosher. I regret, and I believe this sentiment will be accepted by the many who cherish the memory of a beloved professional brother, that the presentation of this portrait should not have been made at a special meeting called for this purpose, in order to afford an opportunity to the many friends of the deceased to contribute as liberally to his record as a citizen, his earnest devotion to his profession and his relations to this Society, as they did for the purpose which enables you to meet with us this evening.

To those who were intimately acquainted with Dr. Mosher, as well as the many members of our profession, who in grateful remembrance cherish his loyal and manly character, this portrait will be a continual reminder of his active presence at our sessions and his honest perseverance in all efforts to promote the good of the Society.

Gentlemen, we are not assembled to eulogize the dead, but it is eminently proper that this part of our evening's proceedings shall record the expressions of the Society of our esteemed colleague and departed friend.

On motion, the Secretary was instructed to address a letter of thanks to Mr. Stevens.

[CONTINUATION IN NEXT NUMBER.]

THE

MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

VOL. V. MARCH, 1884. No. 3.

CONTAGIOUS OPHTHALMIA.

BY GEORGE S. MUNSON, M.D., A. M. C., '79, ALBANY.

In the field of ophthalmology, no subject is, perhaps, more important to both the general physician and specialist than that of contagious eye diseases. By contagious ophthalmia I mean all diseases in which there is a purulent or muco-purulent discharge from the conjunctiva, and this would comprise ophthalmia neonatorum, blennorrhoic or gonorrhoic ophthalmia, croupous and diphtheritic ophthalmia and also the acute stages of trachoma. These diseases are all contagious, but that we need fear infection through micro-organisms floating in the air is highly problematical. There must be inoculation. So much do they resemble each other in their history and treatment that what I propose to say this evening on gonorrhoic ophthalmia will apply equally well to all.

CASE I.—Dr. S. G., aged 66, of powerful physique and strong constitution, while attending a gonorrhoic patient, accidentally poisoned his right eye by the virus. For several days it remained confined to one eye, when suddenly it appeared in the other. The symptoms of a purulent catarrhal affection becoming worse at the end of a week, he came to Albany for the purpose of consulting an oculist, and was referred to my office. There was at this time no chemosis nor corneal affection, only an intense catarrhal conjunctivitis, with a slight sanious discharge. He was persuaded to remain at the City Hospital for a week's

treatment, which consisted in frequent ice-cold applications and the brushing carefully both upper and lower lids with a 5-gr. solution of arg. nit. each morning. On Saturday July 21, he returned to his home very much improved. The following Monday he presented himself again at the office with a characteristic greeting, "Ajax asks for light, and wants no more;" for he was suffering from a relapse of the right eye, due to imprudence in taking a long drive in the country the day before. Symptoms: Right eye, lids red, swollen, tense, but not painful to the touch; chemosis intense and covering considerable of the cornea; cornea hazy, with a large, deep, circular ulcer at upper and nasal quadrant; discharge profuse and purulent. The left eye was almost well.

Treatment: He was immediately put to bed and five leeches applied to the right temporal region and atropine (grs. ii ad ℥ i) applied twice a day; also special nurses at the hospital applied iced compresses on the burning lids continuously day and night and cleansed the eye every twenty minutes. On the fourth day, as the lids and intense chemosis had softened considerably, I ventured to make an application of nitrate of silver (grs. v ad ℥ i) to the lids, and found the effect most beneficial in governing the discharge. The case gradually improved; the ulcer, which threatened for a long time to perforate the cornea, began to heal, the chemosis subsided completely, and at the end of six weeks he was permitted to return home to his professional labors.

Case II.—On October 23, through the kindness of Dr. Van Derveer, a gentleman of 21 years of age consulted me on account of a sudden conjunctivitis of the right eye. At this visit I failed to elicit an inoculation history. Directed iced applications and a zinc wash. The day following I was called to see him at his house, and found that by the advice of his father, who was a firm believer in home remedies, he had made use of three applications of a poultice of scraped potatoes, each poultice, as he informed me, making matters worse, the third being covered with a profuse greenish pus discharge, causing the most intense swelling of the lids and chemosis that I have ever met with, accompanied by considerable pain, fever and general restlessness. The treatment adopted was similar to that of Case I., viz., confinement in bed, two faithful nurses, one for the day, the other for the night, application of leeches to the temple, constant application of iced compresses, atropine drops to be used occasionally, and

careful cleansing of the eye every fifteen minutes with a solution of chlorine water; also a watch crystal was applied over the left eye to protect it from inoculation. The general treatment was directed toward keeping the bowels open and reducing his fever. For three days the disease remained *in statu quo*. On the fourth day the swelling of the lids began to soften and the slight haziness of the cornea to disappear. I now ventured on the application of nitrate of silver once a day, continuing in other respects the same line of treatment. The progress of the case was now quite gratifying and rapid, although it was some four weeks ere he ventured out and was so far recovered as to continue active treatment. It is to be regretted, however, that, with the most excellent recovery that this patient has made, there should still be left a very slight ptosis or drooping of the upper eyelid, although I believe a few months will entirely restore the lid to its normal condition. It is not to be wondered at that ptosis should remain for a time at least after an acute inflammation attended with such an œdematous effusion into its substance; for as the infiltration is absorbed, the integuments of the eyelid are so relaxed that they form a fold, for whose contraction much time and treatment are necessary.

Case III.—Miss J. G., aged 4, living in a neighboring city, gave the history, as far as could be ascertained, of an attempted outrage upon herself and six year old sister. At the time they were admitted at St. Peter's Hospital they were both suffering from gonorrhœa, and for this trouble came under the service of Dr. William Hailes, Jr. But the one four years of age, in addition, had inoculated her eyes, and for the gonorrhoic ophthalmia was referred to myself. At the time of admittance a large portion of the cornea of the left eye had sloughed, the anterior chamber was empty and the eye in a bad condition generally. The right eye was still in a good condition, presenting the ordinary symptoms of acute purulent catarrh. The duration of the disease had been already fully a week. The treatment adopted was similar to that of my other cases, and the success attending it was remarkable. In about two weeks' time the little one returned home, the right eye presenting a normal appearance, while the opacity of the cornea in the left is such as to give hopes that in time it will be scarcely recognizable.

Mild cases of inoculated ophthalmia are not infrequent, and, when taken early under treatment, usually three or four days

will suffice for cure. For example, the night nurse of my first patient, through carelessness, inoculated herself, and, coming under immediate care, was soon well. Mild astringent of zinc and ice water application was all required. In regard to treatment, I concur with recent writers in advising the uninterrupted application day and night of iced compresses to the lids and the careful washing away of the secretion with a soft sponge dipped in a very weak solution of chlorine water, so long as the inflammation is at its height. As soon as the lids begin to soften and the palpebral and ocular conjunctiva to relax their firmness, while the discharge takes on a purulent character, I find weak solutions of nitrate of silver to be the best remedy, and as the disease declines the iced applications are less frequently used, and zinc may be substituted for the nitrate of silver.

In reply to the question which I have often been asked, Why use iced applications in purulent contagious ophthalmia? I may say: By their uninterrupted use we have a most powerful means of removing continuously the heat of the part and so directly lessening the febrile action. Again, cold acts as a powerful irritant, forcing the blood vessels to contract, and so decreasing the amount of blood carried to the inflamed parts, more than any other agent we have at our command; there is also caused such diminished sensibility of the parts as to afford very gratifying relief to the patient.

DISCUSSION.

Dr. Wm. Hailes, Jr.: My old preceptor, Dr. Alden March, used a very graphic method in explaining the conditions existing in excessive chemosis. He compared the cornea to a portion of intestine in strangulated hernia, and said that deep scarification was as necessary to prevent destruction of the cornea as an incision of the fibres of the ring to prevent the sloughing of the intestine.

Dr. Munson: I know that many authors advise to scarify the conjunctiva in case of excessive chemosis, but to me this treatment, in almost all cases, seems both unnecessary and irrational and even harmful. I believe the constant application of ice will prove a sufficient remedy for relieving the strangulated condition of the cornea; and, furthermore, if you scarify, you thereby produce raw, bleeding surfaces on which the gonorrhoic virus can act directly and produce a condition of a sloughing wound — a most disagreeable complication, and which can only result in destructive processes. It is to be admitted that the temptation to scarify would be great in case of excessive chemosis, as in my second patient; but only when the cornea has begun to slough and the ice was not controlling the disease might I resort to scarifying as the last remedy for a desperate condition.

Dr. H. E MERENESS: In 1878 or '79, on the second day after the birth of a child, the father's mother spoke of the child's eyes. I found a free discharge from both eyes. The child's mother (a minister's daughter in good circumstances) admitted that her husband had contracted gonorrhœa when visiting in New York. The parties were cautioned as to the seriousness of the case and the danger of infection. All soiled rags were ordered burned; the eyes were treated by injecting each hour, alternately, sulph. zinc, grs. iii ad oz. i and nitrate of silver, gr. i–ii ad oz. i. The child recovered in two weeks. It is due to mismanagement only that the eyes of a child a week old cannot be properly cleansed. No ice was used.

On the fourth day after confinement the child's grandmother, who was the nurse, became inoculated in one eye. I declined to treat this patient, and advised to employ a professional oculist. The lady lost the infected eye, in spite of prompt and faithful treatment.

Is strict cleanliness, without medication, sufficient in children? and in very young infants is recovery more frequent than in adults?

Dr. HERMAN BENDELL: Gonorrhœal conjunctivitis and purulent ophthalmia of newly born infants are classed as most dangerous and virulent of contagious diseases of the eye. The first form is invariably due to contagion, and may be contracted at any stage of gonorrhœal disease; the second form is due to contagion by direct contact with leuchorrhœal or gonorrhœal discharges or other vaginal secretions conveyed to the eyes by sponges or cloths carelessly used by nurses, but not unlikely is frequently the result of a want of proper cleanliness in washing the eyes of the newly born.

Unfortunately the victim suffering with gonorrhœal ophthalmia, owing to neglect or a sense of modesty or fear of exposure, seldom consults his family physician until he has exhausted the experience of the wise druggist and confidential friend in the treatment of his condition, and these facts will account for the destructive results in a large number of these cases. I believe to be justified in saying that the prognosis in conjunctival inflammation, even in the purulent forms, when properly treated from the outset, is favorable, but the termination of the disease oftentimes depends upon the severity of the attack, the physical condition of the patient and the plan of treatment. Attention to local and constitutional treatment, ventilation of the sick-room, competent nurses and a strict enforcement of sanitary precautions, especially in preventing the spreading of the disease from one eye to the other, are of importance. The tendency of gonorrhœal ophthalmia, especially in those cases coupled with gonorrhœal disease, is of a prostrating character, and this fact, together with a possible loss of vision of one or both eyes, generally tends to depress the already debilitated patient; consequently the importance of constitutional treatment from the very commencement of the disease is forcibly suggested.

The application of caustics and astringents in all forms of ophthalmia, especially in such cases now under discussion, should be exercised with prudence, care and in homœopathic quantities. Oftentimes greater mischief results from a too liberal and improper use of astringents than from the disease itself. In certain forms of ophthalmia the application of astringents

especially of a caustic nature, is suicidal to the eye; therefore the judicious practice of how and when to apply astringent treatment, as well as the selection of a proper kind and strength to be used, will largely assist the chances for recovery.

Experience teaches me that when the patient is seen soon after inoculation that thoroughly cleansing the eye with frequent applications of a tepid solution of boracic acid (two to four per cent.), together with a weak solution of sulphate of zinc (0.2–80.0), applied once or twice daily, with such constitutional treatment as the condition of the patient may demand, will suffice. If the symptoms should become aggravated, the more heroic treatment, such as iced compresses, scarification, leeches and the use of mercurials, is employed. The stage and severity of the disease must govern the treatment; care should be exercised in endeavoring to do too much. Purulent ophthalmia presents itself under various forms and degrees of intensity and frequently of so virulent a character that, in spite of early and proper treatment and judicious management, the cornea breaks down, and the eye, so far as vision is concerned, becomes useless.

Many of our most eminent oculists do not hesitate to recommend free scarification of the chemotic conjunctiva in many forms of purulent ophthalmia. This procedure, I believe, should, when deemed of urgent necessity, be practiced with the greatest caution and its results carefully watched, for not infrequently granulations form on the scarified surface, which are apt to result in cicatrices, causing a continual irritation to the eye and thus developing disease of the cornea. In the diphtheritic form of conjunctivitis, the propriety of scarifying the tissue of the conjunctiva, owing to the possibility of diphtheritic deposits on the surface of the wound and a tendency to favor the development of gangrene, is disputed.

It is claimed that brilliant results have been attained in the treatment of purulent ophthalmia by the energetic application of continuous cold to the eyelids—that is, by placing small squares of several thicknesses of linen or muslin upon a block of ice, and when the same are thoroughly cold applying them to the eye, frequently changing and uninterruptedly continuing the applications. If the idiosyncrasy of the patient can tolerate, and the attendants or nurses be relied upon to faithfully carry out this form of treatment (for, in my opinion, to be of service, the iced applications when indicated, must be changed every few minutes during the day and night), this remedy will largely assist in curing the disease, especially when used in connection with such local treatment as may be indicated. Several of my patients have rebelled against this frigid treatment, and in two cases of gonorrhœal ophthalmia the continuance of iced applications for a longer period than fifteen minutes produced orbital pains of a neuralgic character, radiating over the head and face, greatly adding to the discomfort of the patient.

THE third blood corpuscles, about one-eighth the size of a red globule, have been seen by Dr. Osler, of Montreal, in vessels of the living animal and of freshly removed tissue.—*Med. News.*

RUPTURE OF THE LUNG WITHOUT FRACTURE OF THE RIBS.

BY B. U. STEENBERG, M.D., A. M. C., '70, ALBANY.

I was summoned at 4 o'clock A. M., February 24, 1883, to see Mr. W. B., aged 35, by occupation a dry goods salesman. I had been his family physician for ten or twelve years, and had never before been summoned to prescribe for him, nor had he during that time lost one day from his business on account of illness of any kind.

He gave me the following history: Between the hours of 9 and 10 o'clock the previous evening, while attempting to board a moving train at Troy, missed his footing, but, retaining his hold upon the car, found at the instant of regaining himself that he was about to be drawn between the car and the pillar, or abutment, supporting the arched roof of the depot. With great presence of mind he turned his body facing the pillar, with arms extended, so as to occupy as little space as possible, in the hope that the train might pass him and he thus escape injury. The first car passed without touching him, but the next, being much wider, caught and rolled him between the two unyielding objects, when he fell to the ground helpless.

He had rallied sufficiently in about half an hour to be able to take the next train, upon which he was assisted and accompanied by friends to his home in this city. A messenger was at once despatched to my office, but, being absent in the discharge of other duties, about seven hours had elapsed from the time of the accident before I saw him. Dr. D. H. Cook kindly visited the case for me at about 12 o'clock midnight. I found the patient suffering quite acutely from pain in the left lower thoracic region, with very frequent respirations and very rapid pulse and anxious countenance. The pain seemed to be increased upon every attempt at a full inspiration, thus leading me to believe that a local pleurisy already existed. I examined the external body carefully, but could find no bruised spots nor even the slightest abrasion. Though there was a tenderness or soreness over every part of the thorax, I could not find the slightest evidence of fracture of the ribs or sternum or of either clavicle. I endeavored to allay the pain and irritation by the application of mus-

tard, followed by hot fomentations and the administration of anodynes, etc.

At my next visit, about 9 o'cleck A. M. an extensive and unmistakable pleurisy existed on the left side. On the second day a slight cough appeared, attended with a slight expectoration of dark blood, which continued for several days thereafter. I do not think, however, that the whole amount of blood expectorated exceeded one ounce.

During the third day the pain disappeared entirely from the left side, and the patient was quite comfortable, though the pulse and respirations were much above the normal; the anxious expression of the countenance had given way to a more cheerful one, and I sincerely hoped that we had seen the worst of it. A few hours later, however, a severe pain, more rapid pulse and respiration, a return of the anxious countenance, etc., evidenced the existence of a pleurisy upon the right side. This, however, yielded to treatment in about twenty-four hours, when it became evident that quite an amount of effusion existed on the left side. This condition accounted for the continuous rapid pulse and respirations so marked throughout the entire illness. There was total inability to void urine and to evacuate the bowels. The late Dr. J. S. Mosher saw the case in consultation on the sixth day. His prognosis was unfavorable.

The farther history of the case was not unlike other pleurisy with effusion from similar causes and need not be here recounted. The patient died about noon, March 5, on the ninth day after the accident.

Autopsy, twenty-eight hours after death: Body well nourished and rigor mortis well marked. A close inspection of the external body revealed no sign of injury. An incision was made in the median line from the upper end of the sternum to the umbilicus and the parts dissected back in the usual way. Upon cutting through the cartilages on the left side large quantities of bloody serum welled from the incisions. On removing the sternum the left pleural cavity was found to be filled with effusion. The lung entirely collapsed, with the exception of a portion at the apex, about half the size of my fist, which was solid and engorged with blood and upon the upper anterior surface of which was a rupture about two inches in length. The substance of this nodule, except its pleural covering, seemed to be simply a clot, so easily did it give way upon the slightest pressure. Upon the

right side were found recent pleuritic adhesions in the lower half anterior and lateral surfaces. Heart normal.

This case presents several points of interest: The fact that we have a rupture of the lung in the absence of a fracture or dislocation of a rib or any other bone composing the chest wall. The examination in this particular was very critical. There was but little hemorrhage into the cavity and very little expectoration of blood and no pneumo-thorax. I do not know how to account for this condition, unless it be upon theory that at the instant of pressure the lung must have been under the influence of full inspiration. The pneumo-thorax may have been prevented by the sudden engorgement and coagulation of the blood in the apex, which latter proposition may account for the lack of a more profuse hemorrhage and expectoration.

DISCUSSION.

Dr. J. E. HALL, of Green Island: As an illustration of the different ways in which a person may be injured under somewhat similar circumstances, I will cite a case that came under my care. On the morning of April 20, 1888, H. M., aged 24, rather tall and slim, an engineer on the night force, was about to back his locomotive into the round-house; the wind had blown one of the large doors shut; he left his engine to hold the door, to allow his engine to be backed in by his fireman. While doing this, the violent wind carried him with the door, so as to crowd him against the moving tender. Three hours later, at 7 o'clock, he was brought to the Green Island depot, where I was called to see him. He was in such pain that he was carried to his home in a chair. I found an upward dislocation of the acromial extremity of the left clavicle. The company's surgeon, Dr. McLean, of Troy, being also the patient's family physician, was sent for. We dressed him with compresses over the clavicle, strapped down with long strips of adhesive plaster and bandages. He made a good recovery in about three weeks.

SPUTA OF PHTHISICAL PATIENTS, after alternate drying and moistening, still contains bacilli, and can be successfully used in inoculating animals. M. Vignal concludes that even such sputa in the streets or in apartments might be agents of contagion to persons predisposed, in whom the bacilli would find favorable soil.—*Med. and Surg. Reporter.*

MULLEIN (*verbascum thapsus*) for phthisis was recommended a year ago by Dr. F. J. B. Quinlan, who now reports in the *Brit. Med. Jour.* a case of pre-tubercular phthisis in which the patient gained twelve pounds in one month under the use of mullein.—*Med. and Surg. Reporter.*

COMMENCEMENT ADDRESS, ALBANY COLLEGE OF PHARMACY.

BY E. P. WATERBURY, PH.D., PRESIDENT OF STATE NORMAL SCHOOL, ALBANY, N. Y.

Gentlemen of the Graduating Class of the College of Pharmacy:

I congratulate you, the faculty and the board of trustees, upon the enlarged success and the increasing influence of this collegiate branch of the Union University. I mourn with you that he who was with us a year ago, who then addressed the graduating class, a founder, a worker in all its interests, an inspirer to all advancement, a lover and promoter of all true culture, of all true science, has left us. We cannot imagine so intense a vitality, so unwearied an activity, unemployed; in another sphere that glorious intellect is as busily engaged as ever here, is as helpful, as loving, as kindly affectionate to others, as here. It is a great thing for all of us that we have such a life, such an example, as a memory and an inspiration. I congratulate you that you have had in his place a pupil of his own, and so, through the brain of one of his own pupils, have his thoughts, his methods, come down to you; and he, though dead, still speaketh.

After a course of unremitting application, in which you have covered a broad extent of subject matter, I may congratulate you that you have so thoroughly completed the course laid down for you that, as a matter of right, you this evening receive the well-earned diploma of this institution, and now go out to the work of your lives. I address you as pharmacists; were I to call you poisoners, you would be surprised; and yet the word pharmacy is derived from the Greek word *pharmakon*, which means a poison. You deal in poisons; you compound poisons; more, a remedy out of place in the physical structure is a poison, as matter out of place is dirt. The fact that the name of your occupation thus indicates the substances which you manipulate emphasizes the importance of this college, and convinces us that, when men acquire true wisdom, none will be allowed to practice your profession, to follow your occupation, except those who have, like yourselves, been properly educated, properly prepared. A bill to this effect has been, this winter, introduced into our

legislature thus restricting the practice of pharmacy — a bill which we trust may become a law.

The science of medicine is one of the experimental sciences, and the success of the experiments depends, in a vital degree, upon you and such as you. There must be purity of material, and it is your business to know that it is pure; in this regard you rely greatly upon the manufacturers and those dealers who have established reputations as honest men. But it has been your business so to prepare yourselves, it has been the business of this institution so to prepare you, that you are at the mercy of no man, that you can yourselves test and try and declare that which you yourselves do know. An advance in this respect is shown in the American Pharmacopœia, revision of 1880, which contains a series of tests which, while acting as a check upon unprincipled men, will bring promptly to your minds those things which have been taught you here. You, keeping your eyes open and your wits about you, will prove all things, holding fast only to that which is good and pure.

With rightly suspicious eyes and a penetrating nose, you will test powdered gum arabic for starch and sugar; sugar for chalk, starch and glucose; cream of tartar for flour, starch and terra alba; sweet oil for that derived from cotton seed; quinine for excessive moisture and other of the alkaloids; the essential oils for turpentine.

You have to bear in mind, constantly bear in mind, the ease with which one substance is mistaken for another; you know how easily an ignorant or careless person may substitute any one of the white powders for another; how nearly alike in color and appearance are sulphate of zinc, cream of tartar, tartar emetic, powdered alum, calomel, arsenic; how in place of epsom salts oxalic acid has been administered. The two almond oils can be derived from the same plant; one of these oils is harmless, the other a deadly poison. In this city a death has occurred by their interchange. In this city corrosive sublimate was carelessly put up instead of calomel; the result was an agonizing death and a remorseful life.

You are not so much to fear adulteration of drugs as poorness of material — an inferiority resulting from origin, as in feeble plants which have made imperfect growth, due to an unfavorable year; vegetable products that are old and stale, from which all medicinal virtue has departed; male fern by age becomes worth-

less; the tape-worm laughs in fiendish glee when it is administered. The only way by which you can learn to know bad material is by the experience and familiarity gained in the manipulation of that which is good, as he who continually handles money learns with unerring certainty to reject that which is bad, while he can hardly explain how he recognizes it as spurious.

You have acquired the habit of accuracy as to quantities and proportions. You have to resist any tendency to generosity. You remember the benevolent friend who, watching the painfully careful weighing of a poison for a prescription, said to the apothecary: "Don't be stingy; it is for an orphan." You have learned how to clean mortars, pestles, spatulæ — to use for this purpose the proper material, whether an acid, or papers, or flaxseed, or water; for a taint of a wrong drug may ruin a prescription.

You have become botanists, that you may know plants, the root, the bark, the bud, the flower, the seed, the quality and effects of each; that you may know when each should be gathered, how each should be preserved to be at its best.

You must not only know quantities and qualities, but you must know size of doses, properties and effects; in a way, you must verge on being a physician. A prescription from a skillful medical man came to one of our city druggists, "Sulphate of morphia, ʒ i; divide into 12 powders; one every three hours." The overworked and exhausted doctor would have had a dead patient, had not the watchful druggist seen that sulphate of quinine was meant. A prescription forming a compound of roots, orange peel, etc., contained also two drachms of sulphate of copper where sulphate of iron was intended; again the druggist saved the patient and the doctor.

It might be well to attach to the faculty of this college a professor of hieroglyphics, who should use, as aids to instruction, Egyptian inscriptions and the eloquent labels that touch our finer feelings as we gaze on Chinese tea chests. You will often find that doctors' prescriptions are not only in a dead language, but in a chirography almost indecipherable. It is well that you should know something of Latin. A druggist's intelligent assistant in the neighboring university city prescribed ginger as a remedy for Virgil's bucolics, being unacquainted with Virgil and mistaking the difficulty. Curious orders will reach you sent

by people who can spell only in a sort of phonetic way. Some of these requests have been submitted to me: "*Durpendine*" is German and intelligible; "*night of acid*" is understandable; "*alkhale*" needs no explanation; "*klone*" saves time and ink; "*rose sheal*" can only be solved by the additional word "*sauls;*" "*camfer*" needs no helper; "*parick guat*" any mother with a suffering child would know by instinct; "*blaster peres*" is easy; but "*niepelshiel*" is past finding out.

When you put up a preparation, you understand that the directions therein should be so plain that a fool cannot err therein. My friend's cook was advised to take a seidlitz powder; she dissolved the parts separately; she drank them separately; my friend lost a good cook; the careless druggist, a good customer; society, a humble but valued member.

You must learn to recognize the value of gesture, of bodily movements, and to translate them accurately. A clergyman, devoted and good, had an unfortunate twitch in his left eye; he was at a funeral eulogizing one of his deceased parishioners. "Doubtless," said he, "our departed friend is at this moment in the realm of bliss" [twitch of the eye]; but that has nothing to do with druggists. This same gentleman stepped into a drug store and asked the Hebe who presided over the honeyed sweets at the soda fountain, for a glass of soda. "What syrup?" said the assistant. "Ginger," was the answer, accompanied by the unfortunate twitch of the left eye — and the clergyman complained of the manner in which his temperance sensibilities were outraged.

It is right that you should appreciate your own usefulness. In the nature of things, it must be rare that a physician can make up a prescription so well as an educated, practical pharmacist. He lacks the deftness that is acquired by continual use of hands and faculties. The architect cannot do the work of the mason, though he knows when that work is well done; the painter cannot do the work of the engraver, though he may criticize it understandingly.

You learn not only how to compound different ingredients, but you learn the proper order to be followed in subjecting the simples to the processes they must undergo. If A, B and C are to be combined and chemical union is to follow, it may make the greatest difference whether A and B are first united, for the resultant may be such that it will not unite with C.

You will sometimes be amazed at the blunders and mistakes committed by patients and their friends. You remember the picture in *Punch*—the horrified look of the handsome druggist (they are all handsome; they cannot help it) when the slip-shod little girl stands in front of him with her two bottles to be refilled, and says: "Please, sir, mother took the lotion, and rubbed her leg with the mixture."

You are to be honest, because honesty is right. Perhaps the meanest proverb ever made by a really great man is that which says, "Honesty is the best policy," and thus puts before you the lower motive. If we buy no gem, no jewelry, except of him in whom we have perfect confidence, how much less should we trust our health, our life, to him of doubtful reputation? With you, thoughtlessness, carelessness, forgetfulness, mean death. Be temperate! No more dreadful thing can be imagined than a drunken druggist, unless it be a drunken doctor. If the engineer of the locomotive, with his hand on the throttle valve, holds in his hands the lives of the hundreds on his train, as surely are the life, the health, the happiness of the community, in your hands. See that you keep pace with all the advancement of science and art so far as your business is concerned. Study the law, that you may know what safeguards the state has placed around the sale of drugs, of poisons, and remember that every man is expected to know the law and to obey it. So perform your duties that you be clear of legal and of moral responsibility in case of disaster. Know more every day than you did the day before, remembering that there is no stand-still in knowledge, that he who does not advance, retrogrades. Be men before being druggists. Set before yourselves some model man, some ideal of manly perfection. Have the respect of the community by having first that which is better, that true self-respect which accompanies intelligent, conscientious action.

And now, on this day devoted to congratulations, your *alma mater*, placing her good name in your hands, sends you forth to your work, with great confidence, with great faith, that you will be an honor to her, a credit to yourselves and useful members of the Commonwealth.

HELENINE.—Dr. Valenzuela (*Bull. Gen. de Ther.*) gives 1-6 gr., ten times daily, in broncho-pneumonia, tuberculosis, whooping cough and respiratory diseases. May be used by inhalation.

ABSTRACTA.

PTOMAINES (R. N. Wolfenden, *Lancet*).—These recently discovered substances are found (1) as normal products, (2) during certain pathological conditions, (3) as cadaveric or artificial products.

1. As the result of physiological tissue change they occur in fresh saliva, in urine, especially after meals (Balduino Bocci), and in snake poison. From less than an ounce of saliva sufficient material has been obtained to reduce ferro-cyanide of potassium with a few drops of ferric chloride, and to kill a frog when injected into the thigh. This recalls the statement of the elder Pliny, that the saliva of fasting men was fatal to serpents when put into their mouths.

Gautier has found a poisonous alkaloid in urine, and has determined that snake poison differs from human saliva only in intensity.

2. In pathological states, Selmi shows two volatile bases, like nicotin and coniin, in urine from patients with progressive paralysis; in urine during interstitial pneumonia, two alkaloidal bases with the odor of stale fish, and of ammonia, etc.

3. Cadaveric, or artificial. Selmi used the word "ptomaine" to indicate the cadaveric origin of these pseudo-alkaloids. They are of many varieties; their natural production is slow. Toxic symptoms from eating stinking meat are probably from alkaloidal poisoning. Putrefying casein, brain, liver and muscle contain ptomaines. Even the *products of normal digestion have poisonous properties*, which, imperfectly excreted, may become toxic.

Both from fresh peptone, made by the action of gastric juice on pure fibrin, and from stinking peptone, by boiling with caustic soda, evaporating and extracting, toxic alkaloids are obtained.

On the other hand, Weir Mitchell has found in snake-poison three toxic principles, resembling a peptone, a globulin, and serum albumen.

Classification: 1. Ptomaines like atropine and hyoscyamine, crystalline, which dilate the pupil and accelerate the heart, derived from putrescent albuminous fluids. 2. Sepsin, from decomposing yeast, like strychnia (Schmeideberg and Bergmann). 3. One like morphia in tests, but not in physiological properties (Selmi).

4. One like delphinin, which, warmed with phosphoric acid, gives a red color. 5. One like strychnia in sulphuric acid and pot. bichrom. tests, but not causing tetanus (Ciotto). 6. Alkaloids like muscarin (Gautier, Brieger, etc.). 7. Those like coniin, colorless, of sharp taste like tobacco, consisting of a poisonous and non-poisonous moiety, one part volatile, the other non-volatile; one soluble and precipitated by warmth, like coniin, the other not. 8. Those resembling parvolin and hydrocollidin (Gautier and Sard) and one like collidin (Neucki).

These cadaveric alkaloids may be mistaken later than two days after death for vegetal poisons. Any alkaloid found earlier would be presumptive evidence of administered poison, not of ptomaine.

There is no test surely indicating ptomaine. Physiological characters must be taken in conjunction with chemical tests.

The production of ptomaines in the living human body may be the pathological cause of many obscure conditions.—*Louisville Medical News.*

Prof. Huxley says: The body resembles an army; each cell a soldier; an organ a brigade; the central nervous system headquarters, a field telegraph; the alimentary and circulatory systems, the commissariat; and in which losses are made good by recruits born in camp; and the life of the individual, the campaign, conducted successfully for a few years, but with certain defeat in the long run.

Germs and bacilli are rather the carriers of disease than its producers. The disease carried is probably some semi-organized ferment, like the health-giving ferments, pepsine, pancreatine, etc., or more like the products of decomposition called ptomaines. In the living blood a fibrin-ferment may be rapidly liberated, which will deteriorate the blood cells and lead to septicæmia. The immediate future study of the causes of disease lies in the separation of the coincident phenomena from the real cause, and in the identification of these semi-organized ferments.—*Med. and Surg. Reporter.*

Thunder-storms cause milk and fermented liquors to sour by the deposition of dust, and therefore of bacteria with it, due to the disturbed electrical condition of the atmosphere.—*Mr. Aitken, Royal Society of Edinburgh.*

JEQUIRITY IN TRACHOMA AND PANNUS (*Ther. Gazette*).—Jequirity [abrus precatorius, Jamaica wild licorice, Indian licorice, gunga, black-eyed Susans, sea beans, paternoster seeds, and about fifty synonyms] is a papilionaceous shrub indigenous to India, South America and tropical Africa. The seeds are of two varieties, one of a bright red, the other of a pale yellow color. The red variety has found most favor as an application to granular lids. The remedy was first employed scientifically by de Wecker, of Paris, August, 1882, who received the hint from Brazil. Bruise thirty-two seeds, add five hundred c. c. (about a pint) of distilled water, macerate for twenty-four hours and add the same quantity of hot water. After cooling, filter. This loses its virtue after from eight to ten weeks. The application is made with a brush. In four or five hours there is a slight injection of the tarsal conjunctiva and increase of tears. Later there is œdema of the entire conjunctiva. The watery secretion from the eye becomes viscid, containing small flakes. These flakes form a membrane, which becomes slightly adherent. Next morning the lids are glued together, and are hot and painful, and, if pulled open, hot fluid escapes; conjunctiva is more chemotic and is covered with a grayish membrane. Sensitive patients now complain of pain and inability to sleep. There is seldom any fever, save a slight elevation of temperature in the evening. On the second day eversion is impossible, and the infusion must be poured into the palpebral fissure. On the third day the discharge is purulent. The cornea is not liable to be affected. The fifth day brings an amelioration; the lids are not so thick, chemosis begins to disappear, and the cornea, if it was involved, shows signs of defect in the lower half, but this is not constant. By the sixth day the membrane is separated along the edges and gradually disappears. This is the usual course excited by three applications a day for three days. The inflammation is controlled by the number and strength of the applications. The reaction is more marked if slight irritation is made with a brush while applying the infusion. Cases are occasionally met which are not benefited by this treatment. In cases even where purulent inflammation is not excited the results are usually satisfactory.

The factor in the causation of the "substitutive inflammation" excited by jequirity seems to be traceable to a microbe existing always in the atmosphere and developed by the jequirity "culture

fluid." [This microbe has been identified, it is said, with the micrococcus of gonorrhœa. The tincture of jequirity, the infusion when treated with corrosive sublimate, and the recently and thoroughly filtered solution are all inert, because of the absence of this microbe.]

Conclusions: The strength of the infusion influences the amount of the reaction. An artificial inflammation can be set up any number of times by the use of the infusion, which speaks against its being an infectious disease. It acts on mucous membranes other than the conjunctiva. An involvement of the cornea can always be prevented by a suspension of the applications and the use of a corrosive sublimate solution, 1:8000, two or three times a day [which destroys the bacteria of the jequirity solution, which are supposed to have previously destroyed those other bacteria which are now thought to be the cause of granular lids].

Poisoning by Jequirity.—Dr. Lagleize (*London Medical Record*) was called to see a youth, aged 19, with the following symptoms: Face swollen, eyes staring, great salivation, pulse 180 and weak, skin dry, extremities cold. He noticed on the ground some jequirity seeds. As the symptoms resembled those of pilocarpine, he gave an emetic of ipecac, afterwards some atropine, and warmth to the extremities. The patient soon recovered.—*Phila. Med. and Surg. Reporter.*

Poisonous Jequirity Puncture.—Jequirity seeds rolled, when wet, into little needles, called "suis," and fixed lightly into a wooden handle, are used to poison cattle, in the Chamar tribe of India. An animal is stabbed with one of these and the point allowed to remain in the tissue. The animal dies in a few hours from the enormous amount of micrococci and bacteria which form in the blood. Man-poisoning has occurred by similar puncture.—*Brit. Med. Jour.*

Jequiritic Bacilli.—H. Sattler, of Erlangen (*Kl. Mon. f. Augenheilk*): The intensity and duration of the jequiritic inflammation is increased by a number of applications. If the infusion is applied but once a day the corneal symptoms are not serious. By shortening the period of maceration of the beans to from three to six hours less violent conjunctivitis is produced. Increased concentration of the infusion makes it more active, but does not proportionally increase the intensity of inflamma-

tion. The activity is less when maceration takes place at a temperature of from 90° to 95° F., while maceration at 32° F. gives as active a preparation as at ordinary temperature.

The schizo-myscites, or cleft fungus, which must be classed as a bacillus, exists in immense numbers in the infusion. This microbe has been found five minutes after making the infusion, using hot water from the beginning. These bacilli increase by a sort of segmentation, giving off spores when about forty-eight hours old. They retain the property of vegetating if re-moistened after drying for a week. In an ice-chest there is arrest of development. A temperature of 180° F. for five minutes does not affect the germinating power. The fortieth culture remains active. They appear identical with the bacilli of the secretion of purulent conjunctivitis. Similar ophthalmias result from the use of jequirity infusion, a high culture and the inflammatory secretion. In the secretion of jequiritic ophthalmia the same bacilli are found in the spore-bearing stage, but not in large numbers. They are more abundant in the infiltrated conjunctiva and sub-conjunctival tissue of the retro-tarsal folds. The secretion of jequiritic ophthalmia, applied to another eye, produced much less intense conjunctivitis. Jequirity infusion is not entirely freed from germs by boiling. Bichloride solution, one to ten thousand, sterilized the infusion, but its application still caused conjunctivitis, not due to the chloride of mercury; the bacilli were prevented from germinating by the chloride, but were not robbed of their irritating qualities. The bacillus does not possess the same pathogenitic property when entirely separated from the mother liquor.—*N. Y. Med. Jour.*

Failure of Jequirity.—Parisotti and Galezowski (*Rec. d' Opthalm.*) obtained beans from the same pharmacist who supplied Wecker, and proceeded with rigid regard to Wecker's directions. They noted a smooth appearance of the conjunctiva where the granulations had been. The granulations are concealed by the swelling of the mucous membrane. When the swelling disappears, the granulations are found intact. They regard jequirity treatment as not without danger to the cornea, which may be even entirely destroyed.—*N. Y. Med. Jour.*

Danger of Jequirity.—Dr. H. Knapp applied jequirity to the left eye of an anæmic girl, ten years old, affected with acute trachoma, while older remedies were applied to the right eye.

In five or six days both eyes were similarly swollen, and there was an ulcer of the cornea in each. Antiphlogistic treatment and ice-cold applications day and night for nearly a week saved the eyes. From this we learn that the use of jequirity is not without danger to the cornea, and that the secretion of jequiritic ophthalmia may be conveyed to, and infect, a healthy eye.

Dr. Knapp's method of using a new remedy in one eye and a known remedy in the other commends itself. In a case, inefficiently treated for years, he used jequirity in one eye and copper in the other; both eyes were cured in about five weeks, and neither remedy possessed any advantage over the other. What the case needed was systematic, regular and careful treatment.

Dr. Knapp's present view is that "jequitity is *a* remedy in trachoma, but not *the* remedy."—*Dr. W. B. Marple, in Columbus Med. Jour.*

SLOUGHING of the cornea, eight days after cessation of jequirity application, is reported by S. Pollak, M.D., of St. Louis, as probably due to accidental injury by the patient's finger. Dr. Pollak advises to sterilize the infusion, to delay the bacteria of putrescence, which may enter the tissue and cause a septic state. He used Pasteur's method: (1) Boiling distilled water was poured into a previously heated flask, through a filter of absorbent cotton; the flask was corked, to stand till cool; (2) the jequirity beans were bruised, decorticated and put into a previously heated flask; the cold sterilized water prepared the day before was poured on the beans through absorbent cotton, and left undistubed for twenty-four hours; then sterilized warm was added; (3) the next day the filtering process was carried on under a previously heated glass retort, to prevent ingress of germs from without. This infusion did not exhibit any sign of decomposition in eight days.— *Weekly Med. Review.*

UNION MEDICAL ASSOCIATION—TWENTIETH ANNUAL MEETING.

The annual meeting of this society was held at the Rockwell House, Glens Falls, N. Y., February 19. The society embraces the counties of Warren, Washington, Saratoga, Rensselaer and Albany. About thirty members attended. The society was called to order by Dr. Jno. Ben. Stonehouse, president, who

delivered an address on "The Care of Pauper Insane." His remarks took the form of a plea for the better care of these unfortunates and for greater accommodations. This address will appear in a future number of the MEDICAL ANNALS.

Dr. T. W. Nellis, of Albany, reported two cases of strangulated hernia and three cases of ovarian hernia.

Dr. F. B. Streeter, of Glens Falls, reported a case of perforating duodenal ulcer.

Dr. G. R. Martin, of Glens Falls, reported a case of ovarian tumor.

The election of officers for the ensuing year resulted as follows: Dr. T. B. Reynolds, of Saratoga, president; Dr. W. B. Jones, Sandy Hill, Dr. C. S. Barney, Glens Falls, Dr. J. J. Flint, Troy, and Dr. J. W. Moore, Cohoes, vice-presidents. Dr. A. O. Ameden, Glens Falls, was re-elected secretary and treasurer. Dr. R. C. McEwen, Saratoga Springs, was elected to fill a vacancy on the executive committee caused by the election of Dr. Reynolds to the presidency.

The following were elected delegates to the American Medical Association, which meets this month: Dr. James Ferguson, Glens Falls; Dr. R. C. McEwen, Saratoga Springs, and Dr. J. W. Moore, of Cohoes.

The next meeting of the Union Medical Association will be held in Saratoga Springs in May.

UNION INFIRMARY OF THE CITY OF SCHENECTADY.

The bill introduced in the assembly by Mr. Veeder, last January, to incorporate the "Union Infirmary of the City of Schenectady," has been reported favorably from the various committees, and is now in the hands of the committee of the whole.

Section first of the act declares that L. Ellwood, Robert Furman, Daniel D. Campbell, Maurice Perkins, C. O. Yates, B. A. Mynderse, J. S. Landon, T. W. McCamus, N. I. Schermerhorn, Charles Stanford, G. G. Maxon, A. A. Van Vorst, C. L. Blakeslee, Ira Brownell, C. G. Ellis, Edward Ellis, Walter McQueen, Robert C. Dorn, Richard Fuller, Charles Thompson, Howland S. Barney, W. E. Walker, J. Westinghouse, J. L. Swits, G. E. McDonald and J. A. DeRemer are declared to be and are consti-

tuted a body corporate and politic by the name of the "Union Infirmary of the City of Schenectady," etc.

The object of the corporation is to establish, support and sustain in the city of Schenectady a hospital for the sick and disabled, wherein such persons as need it may receive all necessary care, suitable medical and surgical treatment, under such by-laws and regulations as the board of trustees may from time to time establish, and said corporation may, for the purposes thereof, take and hold in trust or perpetuity or otherwise, by purchase, gift, grant, devises and bequests, real and personal estate to an amount not exceeding two hundred and fifty thousand dollars.

The act provides that the following gentlemen shall compose the board of trustees: J. S. Landon, Charles G. Ellis, Livingston Ellwood, Maurice Perkins, Robert Fuller, Barent A. Mynderse, Nicholas I. Schermerhorn, Robert Furman, Daniel D. Campbell, Thomas W. McCamus, John A. DeRemer, Charles L. Blakeslee, Walter McQueen, J. Westinghouse and Charles Sanford. Whenever vacancy shall occur in said board by death, removal, resignation, or otherwise, the vacancy shall be filled by the remaining trustees. No trustee or trustees shall directly or indirectly receive any compensation for his or their services, nor be interested in any contract connected with, or furnishing any supplies for, said hospital.

Section fourth of the act directs the manner of the board's organization by the election of a president, vice-president, secretary and treasurer. Section fifth gives the trustees power to transact the business of the corporation, to appoint all necessary physicians, surgeons and all other help necessary in or about the hospital; make all needful by-laws, rules and regulations for the government, conduct and management of said hospital, and to fix the terms for board and care and for medical and surgical treatment upon which all parties who are able to pay therefor shall be entitled to be admitted thereto. Section seventh declares that the real estate and personal property of such corporation shall stand on the same footing in respect to supervision and inspection as other public charities in the city of Schenectady, and shall be exempt from taxation. H. V. HULL, M.D.

THE MEDICAL ANNALS.

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

F. C. CURTIS, M.D., A. VAN DERVEER, M.D., LORENZO HALE, M.D.,
JNO. BEN. STONEHOUSE, M.D., WILLIS G. TUCKER, M.D.

VOL. V. MARCH, 1884. No. 3.

ALBANY MEDICAL COLLEGE—ALUMNI DAY AND COMMENCEMENT.

Alumni day was celebrated at the Albany Medical College, on Wednesday, March 5. At 10 A. M. the library of the College was opened to the alumni, who were received by the officers of the Alumni Association and the faculty of the College. At three P. M. the eleventh annual meeting of the Alumni Association was called to order by the acting President, Dr. F. S. Greene, of Coxsackie, in Alumni Hall. Over two hundred members were present. The address of welcome to the alumni was delivered by Prof. Maurice Perkins, who greeted the graduates in a hearty manner. He described the improvements which had been made to the College building during the past year, and stated the changes in the faculty recently made, referring with much feeling to the loss of the lamented Dr. Mosher.

After the minutes of the last regular meeting were read by Dr. W. G. Tucker, Secretary, eulogies upon the late President, Dr. Mosher, were then made a special order by a unanimous vote.

David Murray, LL.D., secretary of the State Board of Regents, in the course of his commemorative address, said: "No man can really be a great physician who is not at the same time much more than a physician. In this profession, more than any other, for its best types, one must have not only quick and sound intelligence, but the instincts of a gentleman. In him who is to be admitted to the most sacred recesses of our homes, to be entrusted with cherished secrets, to see us in our periods of weakness and agony, we want not only the skill of science, but the gentle, thoughtful ministrations of a kind heart. These qualities

are what make up not only the acceptable physician, but equally in every other vocation and relation of life, the men whom we most respect and cherish. With these qualities Dr. Mosher was endowed in a high degree. In intellectual activity he had few superiors. His social qualities endeared him to his kindred, the community and to the state. Gratitude for his unselfish services filled many hearts with grief at his death. He was calm, clear and clever; undisturbed by success and undismayed by failure. His last hours were spent in preparing for a brief rest from labor. He put his house in order, and labored far into the night writing helpful and needful letters to his friends. Then he put aside his finished tasks and sought the repose which protracted labor made welcome. Then the heart which had battled with an unseen and mysterious malady ceased to beat. He passed from the repose of sleep to that of death. His great and manly soul, scarred with the conflicts of life, but hopeful and courageous, tender and true, finished its earthly probation."

Hon. St. Clair McKelway addressed the association on Dr. Mosher's position as a citizen. He held up to view the many-sided aspects of the busy man of affairs. His wonderful and varied attainments were evidence of his value to the community; his natural gift of sociability was the cause of the great love in which he was held by those who knew him best. Maimed and diseased nature sought his heart as an infirmary, to be healed. Dr. Mosher was a self-made man. He fought his way into knowledge; he sacrificed years and comfort to the purpose to start well. His study, the trusts and places filled with honor by him, the many fields in which he gleaned and the expanding influence of his life are well known. No man was better known or loved here.

Dr. Samuel B. Ward then spoke briefly of Dr. Mosher as a physician. The history of his professional life and work from his graduation at the Albany Medical College in 1863 to the day of his death was given in detail. Numerous positions of honor and trust were filled by him. He was a leader among his colleagues. His influence in the struggle within the profession itself, for larger liberty of thought and action, was unequaled. His services as an expert were in constant request. He studied continually to perfect himself as a general practitioner. He loved Albany, and expected to close here a calm and studious old age. Recalling the man as a whole, and remembering him as he

was to his friends, to his calling and to this college, we realize that we shall not look upon his like again.

On motion of Dr. Van Derveer, a vote of thanks was tendered for the addresses.

Routine business was then taken up, and the report of the Executive Committee was read by the Secretary, detailing the work done during the year. The report of the Treasurer, read by Dr. G. L. Ullman, showed receipts $120.54 and disbursements $101.15. The report was referred to a finance committee, consisting of Drs. J. S. Peasley, S. C. Burton, A. B. Burger and B. A. Mynderse.

The annual address was then delivered by the acting President, Dr. F. S. Greene, who briefly reviewed the progress of the profession, and spoke a few words of counsel to the class of '84, whom he received to membership in the association.

Drs. Collins, Mosher, Rhein, Van Alstyne and Stonehouse were then appointed a committee to nominate officers for the ensuing year.

The report of the historian was next read by Dr. Jno. Ben. Stonehouse, of this city. It recommended that work be at once begun on a catalogue of the alumni. The necrological list showed that twelve members of the association have died during the past year.

Reports of the class historians were submitted by Dr. A. B. Huested ('63) and Dr. H. V. Hull ('74). A report of the class of '73 was received from Dr. H. B. Whitehorne, of Verona, N. Y.

Dr. Lorenzo Hale, from the Committee on Alumni Prizes read the following:

The Committee on Prize Essays report that in competition for the "McNaughton Memorial Prize" three essays have been received on the assigned topic, "The Effect of Climate in the Treatment of Pulmonary Tuberculosis." They all exhibit careful study on the part of their authors.

The business-like essay by "Spe Vivimus," while taking meteorlogical points into consideration, insists prominently on fresh air. The writer says: "A vitiated atmosphere is a powerful cause of phthisis. Among the poorer classes it would appear not to be difficult to attribute to overcrowded rooms, in which they often sleep and work, the formation of tubercles. Should one case exist under these circumstances, molecular changes might easily occur through the introduction into healthy lungs

of minute particles of disintegrated lung tissue given out in the breath of a phthisical patient and not removed by ventilation."

In his "Resumé" he says: "A change from an unfavorable to a favorable climate is sometimes apparently instrumental in effecting a cure." "There is but one common element underlying the whole of climatic therapeutics, and that is the change of air."

The essay by a "Climatologist," after discussing the nature of an equable climate, a dry climate, pure air and an oceanic climate, contains the result obtained from addressing an inquiry as to the therapeutic value of climate to one hundred and six practitioners in this country and in Europe. Extracts from eighteen replies, out of eighty-three received, are an interesting part of the essay. After defining varieties of phthisis, he enunciates this law: "Each variety of phthisis is benefited by certain well-marked climatic characteristics, which, if applied to the treatment of either of the other varieties, would be useless or injurious." To keep this law inviolate, he gives auxiliary rules in regard to residence, age, sex, habits, tastes, the stage of the disease and the duration of the visit. The writer then goes on to show that catarrhal phthisis demands a dry and cool climate, as the Adirondacks; that fibrous phthisis does better in a dry and warm climate, as in Colorado or Algiers; and that tubercular phthisis should have the moist and warm climate of the popular oceanic isles. This essay has been prepared with evident care and labor.

In the essay by "Nomad," after preliminary observations, statistics of the fatality of phthisis, etc., the special topic begins with the remark: "Ever since the memorable seven-years outdoor treatment to which King Nebuchadnezzar of old was subjected, doctors have sought the cure of diseases in a change of physical surroundings."

Humboldt, Malte Brun, Blodget and others are quoted in the definition of "climate," and the climatic features that are popularly regarded as essential in the treatment of consumption are separately discussed. The recent serial of Dr. J. H. Tyndale in the *New York Medical Journal*, giving the differing views of eminent men, is characterized as valuable, yet desultory; and he appends this remark of a talented physician in the last stages of consumption: "In attempting to follow the instructions of my New York medical adviser, and also those of my Philadelphia

medical adviser — the one recommending a cold, the other a warm climate — I have made the result a failure."

Climates are classified according to their physiological effects: First, stimulating, which may be moist or dry, but always cool; second, sedative, always warm and generally moist; when very warm and dry it becomes debilitating; third, neutral, partaking of the characteristics of the first two and suited for convalescence; fourth, mixed, a climate of sudden transitions, and an auxiliary cause of consumption. The stimulating climate he separates into the climate of altitude and the climate of northern sea-coasts.

He concludes that a dry elevated climate is adapted to patients of a lymphatic temperament with catarrhal phthisis. The climate of northern sea-coasts, avoiding such climates of the United States Atlantic coast as are "excessive," and preferring the stimulating climates of our Pacific coast, he believes are adapted for cases of tuberculous origin, before softening has taken place. Of sedative climates, the hot and dry inland tropical regions are too debilitating to be considered. While the warm and moist climates are prescribed for fibroid phthisis, and for catarrhal phthisis with hacking cough and with a general erethistic state of the organism.

In a supplement is placed a consideration of the respective merits of a number of noted health resorts. Perfect equability is shown to be as undesirable as it is unattainable. To quote Dr. Johnson, "A certain set of men pass their lives in observing the changes of the weather, and die at a good old age with the conviction that the weather is changeable."

There are also with this essay voluminous statistics of seventeen localities, compiled from records on file at the office of the Chief Signal Officer of the Army. A bibliographical list of one hundred and forty treatises on the subject is appended.

The committee are of the opinion that none of the essays presented in competition for the "McNaughton Memorial Prize," although carefully prepared, present enough that is original or new to justify the committee in awarding the prize.

For the "Surgical Prize" of three hundred dollars an elaborate essay has been received, which exhibits creditable work in compilation of what has heretofore been maintained *pro* and *con*, in the discussion of various points in the pathology and treatment of Colles' fracture. Forty different modifications of treatment

are described, and many of them are illustrated. Three specimens accompanying the essay are, first, a plaster cast of the wrist and hand, showing the characteristic deformity of Colles' fracture; secondly, a bony specimen of recent fracture; and, third, a dissection of an old united Colles' fracture, showing fracture of the styloid process, dislocation of the ulna and of the tendon of the extensor ulnaris. The two dissected specimens are well executed and especially valuable.

The committee have awarded to the writer of this essay, bearing the motto, "Concordiensis," the "Surgical Prize" of three hundred dollars.

(The reading of the report was suspended while the envelope marked "Concordiensis" was opened, and found to contain the name of Clinton B. Herrick, M.D., class of '80, Troy, N. Y. Dr. Herrick, who was present, was called forward, and received the "Surgical Prize" of three hundred dollars, offered by Dr. Albert Van Derveer. The report was then continued, as follows:)

The committee recommend for the coming year, instead of the continued offer of prizes, that an acceptable course of lectures be provided for the alumni, and they offer with this report the following resolution:

Resolved, That the Executive Committee are authorized to appoint a committee to secure voluntary contributions from the alumni, and to place all funds collected in the hands of a proper custodian, for investment, and to use the annual income from this fund to secure an acceptable course of lectures, to be delivered to students and alumni. on alumni day of each year and on the day following.

Respectfully submitted,

A. VAN DERVEER,
H. BENDELL,
LORENZO HALE.

On motion of Dr. D. C. Case the resolution was adopted.

Dr. M. L. Rhein, from the nominating committee, reported the following, who were elected officers for the year:

President—Horace T. Hanks ('61), New York city.

Vice-Presidents—Geo. M. Teeple ('49), Bridgeport, Conn.; Edwin Barnes ('65), Pleasant Plains, N. Y.; A. B. Burger ('66), Mechanicville, N. Y.; E. S. Allbee ('70), Bellows Falls, Vt.; Wm. A. Hall ('75), Fulton, N. Y.

Secretary—Willis G. Tucker ('70), Albany, N. Y.

Treasurer—G. L. Ullman ('70), Albany, N. Y.

Historian—J. B. Stonehouse ('71), Albany, N. Y.

Executive Committee—Albert Van Derveer ('63), Lorenzo Hale ('68), Maurice J. Lewi ('77), C. B. Herrick ('80).

The alumni then adjourned.

THE COMMENCEMENT.

At eight o'clock the fifty-second annual commencement exercises of the College were held at Music Hall, in the presence of a large an appreciative audience. The stage was occupied by the officers and members of the faculty, representatives of the profession and prominent citizens. The order of exercises was as follows:

OVERTURE—"One Summer," - - - - - - - - *Hoffman.*
PRAYER, - - - - - - REV. WALTON W. BATTERSHALL, D.D.
SELECTION—"Le Petit Corsair," - - - - - - - *Branam.*
ESSAY—"Given a Question—to Find its Solution," WM. B. MELICK, 2D.
CORNET SOLO—Selected, - - - - - - - - - - -
CONFERRING DEGREES. By the President, HON. AMASA J. PARKER, LL.D.
WALTZ—"Visions," - - - - - - - - - - *Fahrbach.*
ADDRESS, - - - - - - - HON. HENRY R. PIERSON, LL.D.
GAVOTTE—"L'Ingenue," - - - - - - - - - - *Arditi.*
VALEDICTORY, - - - - - - - - - ROBERT BABCOCK.
SELECTION—"Hungarian Dance," - - - - - - *Hasselman.*
CURATORS' REPORT, - - - - - - - S. H. FREEMAN, M.D.
REPORTS ON PRIZES AND APPOINTMENTS.
BENEDICTION.
MARCH—"King Karl," - - - - - - - - - - *Eilenberg.*

Prizes were awarded as follows: For the best senior examination, $50, to J. D. Craig; for the second best examination, a pocket case of surgical instruments, to W. B. Melick, 2d; for the best junior examination, a prize of $30 was awarded to C. W. Geel; for the second best examination, $20, to Charles F. Wolf; for the best report of the surgical clinics of Drs. Van Derveer and Ward, pocket cases of surgical instruments were awarded to W. F. Robinson and E. L. Angus; for the best report of the eye and ear clinic of Dr. Merrill, a Loring ophthalmoscope was awarded to Jacob M. Falk.

The appointments on the staff of St. Peter's and the Albany Hospitals, open to competitive examination to members of the graduating class, were awarded as follows: St. Peter's Hospital: Senior resident physician, Dr. J. A. Flynn; junior resident physician, Dr. J. V. Hennessey and Dr. W. B. Melick, 2d. Albany

Hospital: Junior resident physicians, Dr. Robert Babcock and Dr. James W. King.

President Parker also announced that the honorary degree of doctor of medicine had been conferred on Dr. Norman L. Snow and Dr. Henry Hun.

The following is a list of the graduating class, forty-three in number:

Babcock, Robert,	N. Y.	Kellogg, W. Clinton,	N. Y.
Bloss, Fred S.,	"	King, James W.,	"
Bowen, J. Edwin,	"	Lansing, Elmer E.,	Egypt.
Bronk, Edmund F.,	"	Marselius, Willard C.,	N. Y.
Coe, Charles M.,	"	McCaughin, James A.,	"
Cooley, Clinton G.,	"	McTammany, George H.,	"
Craig, Joseph D.,	"	Melick, William B., 2d,	"
Cummings, William A. E.,	"	Morehouse, Edgar W.,	"
Curtis, Pierson C.,	"	Rich, Jacob A.,	"
Devoll, Franklin M.,	"	Robinson, Walter F.,	"
Falk, Jacob M.,	"	Rulison, Luman B.,	"
Fitzgerald, David, J.	"	Selkirk, James,	"
Flynn, Joseph A.,	Mass.	Stafford, Patrick E.,	"
Greene, Fred R.,	N. Y.	Stevenson, Michael D.,	"
Harris, Louis A.,	"	Swift, George E.,	"
Hennessey, John V.,	"	Timmerman, Charles F.,	"
Hickey, Clinton G.,	"	Walker, Robert A.,	"
Holding, George W.,	"	Ward, Bela J.,	"
Hollidey, Hamilton,	"	Wheeler, M. Arthur,	"
Hubbard, Winfield G.,	N. H.	Wright, Eliphalet N.,	Ind. Ter.
Ives, Hiram L.,	N. Y.	Zeh, Edgar,	N. Y.
Jones, Arthur A.,	"		

THE BANQUET.

At the close of the commencement exercises the eleventh annual dinner of the Alumni Association took place at the Delavan House. The dining hall was tastefully arranged, and a large portrait of the late Dr. Jacob S. Mosher rested on an easel, surrounded by a wealth of flowers, in the centre of the room. Grace was said by Rev. Dr. Dean, after which the elaborate menu occupied the attention of the graduates and their guests. When the tables were cleared, the "Greeting to the Alumni" was sung, and the toast, "To the memory of him who would have presided to night—Dr. Jacob S. Mosher," was proposed and drunk standing. Dr. E. P. Waterbury responded in an elegant eulogy on the departed professor. Toasts were then given as follows: "Our Association," by the President elect, Dr. H. T.

Hanks; "The Legislature," by Major James Haggerty; "The Clergy," by Rev. Dr. Dean; "The State of New York," by Hon. Silas B. Dutcher; "The Legal Profession," by Joseph A. Lawson; "The College of Pharmacy," by Dr. A. B. Huested; "The Young Practitioner," by Dr. David Fleischman; "The Class of '84," by Dr. W. F. Robinson. During the evening the "Society Ode," the "Triangle Song" and the "Parting Ode" were sung, the last bringing to a fitting end one of the most memorable gatherings in the history of the Alumni Association of the Albany Medical College.

THE ALBANY COLLEGE OF PHARMACY.

The third annual commencement exercises of the Albany College of Pharmacy were held in Alumni Hall, Medical College building, on Tuesday evening, February 26, at eight o'clock. Before that hour the hall was crowded with the friends of the graduating class, so that standing room was not available. The exercises opened with music by Holding's orchestra, followed by prayer by the Rev. W. S. Smart, D.D. Alfred B. Huested, M.D., on the part of the faculty, delivered an eloquent address, and Joseph W. Russell, Esq., president of the board of trustees, conferred the degrees; music followed, after which E. P. Waterbury, Ph.D., president of the State Normal School, addressed the graduates in a happy manner (see page 74). Frank Richardson carried off the honor of valedictorian. The programme concluded with the presentation of prizes by Prof. Willis G. Tucker, secretary of the faculty, and benediction by the Rev. Dr. Dean, chancellor of the Cathedral Chapel of All Saints. President Joseph W. Russell conferred the honorary degree of Ph.G. on Prof. A. B. Huested, M.D., and Louis Sautter, Esq.

The following prizes were awarded: To Frank Richardson, $50, for the best final examination in all branches; to G. V. Dillenback, a prize of $30 for the best graduating thesis; to Richard H. Roth, of Rondout, N. Y., a prize of $20 for the greatest proficiency in the chemical laboratory course. Frederick Neudorf, Jr., received a prescription balance and weights, the gift of Albert R. Griffith, Ph.G., of Oil City, Pa., an alumnus of the College, for the best examination in pharmacy, and T. H. Tipping, of Albany, a prize of $25 for the best general examination at the close of the junior year.

The following are the names of the graduating class: George W. Burr, Broadalbin; Frank M. Clement, Albany; Edward J. Griffith, New York city; Jurian W. Jones, Albany; Orrel T. Larkin, Plattsburgh; Frederick Neudorf, Jr., Albany; Josiah Pardee, Vernon; Frank Richardson, Rogersfield; Wm. T. Stafford, Albany; De Baun Van Aken, Guilderland Centre; Frank B. Warren, Albany. The following have completed the course, but their diplomas are withheld until their period of apprenticeship shall have expired: Garret V. Dillenback and Harry C. Vedder, both of Albany.

At the conclusion of the exercises at Alumni Hall, the faculty, trustees, alumni and class of '84 banqueted at the Delavan.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.

[CONCLUSION OF THE MINUTES OF THE JANUARY MEETING.]

The regular order of business was then resumed.

Dr. J. P. BOYD presented a post-mortem specimen of *placenta prævia*, for the possession of which he said he was indebted to Dr. F. L. Classen, and read the following:

Post-mortem examination, December 27, 1883, of the body of Mrs. R. S. Rigor mortis marked; œdema of lower limbs. Firm pleuritic adhesions at base and apex of both lungs: hypostatic congestion at base of both lungs. Heart cavities empty; valves normal. Liver granular, otherwise normal. Stomach filled with indigested food; mucous membrane normal. Left kidney—broken down epithelium in pelvis, spots of extravasated blood in cortex. Right kidney normal. The vagina contained a quantity of blood. An incision was made through the upper border of the fundus uteri, and a fœtus of more than eight months was extracted. The amniotic bag was intact. The uterus was excised. The os was found enlarged and congested, with slight lacerations. Owing to the location of the placenta, there was no communication between the os and the cavity of the uterus. The uterine canal was laid open, disclosing a rupture of the blood vessels of a placenta prævia lateralis. The brain, examined next day, was normal, excepting slight congestion of superficial vessels.

Dr. D. H. COOK read a paper on "Puerperal Septicæmia."

Discussed by Drs. J. P. Boyd and D. C. Case.

The Secretary read a communication from the Committee on Legislation of the Medical Society of the State of New York, in the form of a printed copy of "An Act to Establish the Medical Faculty of the University of the State of New York."

On motion, its consideration was deferred until the special meeting, February 1.

Adjourned.

E. A. BARTLETT, M.D., *Secretary.*

THE

MEDICAL ANNALS:

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CASES OF PUERPERAL SEPTICÆMIA.

BY D. H. COOK, M.D., A. M. C., '73, ALBANY.

The subject to which I shall briefly call your attention this evening is one that at present seems to occupy the medical mind to a great extent. Last winter my attention was particularly called to it by an article in the *Journal of Obstetrics*, Vol. XV., page 892 — six cases reported, four deaths and two recoveries. At that time, as it had fallen to my lot to read a paper before a local society, I reported my experience. Some parties present thought the paper of interest, and have importuned me to read it here. I feel that I need to apologize for the lack of definiteness in the account of these cases, due to their being reported from memory. It was my good fortune during my early days of practice to escape scot-free from being obliged to contend with this form of disease; but luck was not to be always on my side.

CASE I.—October 4, 1878, I delivered a woman who had the misfortune to develop afterwards a thoroughly septic state. On the third or fourth day the fever was ushered in by a chill, and I began to suspect that all was not well with my patient, but the nurse laughed at my fears and said that it was only milk fever. The condition did not improve, and the discharges became offensive. I put the patient on large doses of quinia, and ordered copious carbolized vaginal injections. That my directions were faithfully followed I am sure was not the case, for the nurse was

positive up to the day of the patient's death that it was purely a milk trouble and that my fears were unfounded. Of course, the death of my patient made a great impression on my mind, and it was a source of regret with me that I had not used intra-uterine injections. I resolved that I would resort to them if ever it was my fortune to have another case of this kind.

Case II.—On March 3, 1879, I met with a case that gave me an opportunity to try the effect of intra-uterine medication. This woman had a perfectly normal labor, and she bid fair to make a good recovery. After six or seven days I ceased making daily calls, when, to my surprise, I was summoned to my patient, to find her in a high fever, which had been preceded by a chill; her discharges had become offensive, and I had a well-marked case of puerperal septicæmia. I ordered hot applications over the bowels, gave quinia in large doses, and immediately made my way to an instrument shop and purchased a double catheter. Returning to my patient, I connected the catheter with a syringe and introduced it into the cavity of the womb, which was then thoroughly cleansed with carbolized water. This treatment I continued for several days, and my patient made a speedy recovery.

Case III.—On the 28th of February, 1881, I was called to a woman who had a miscarriage two weeks previous, and concealed all knowledge of it from others; but her condition became so alarming that her people sent for me. Her temperature was high, her pulse rapid and feeble, and she was apparently in a condition of collapse. I felt alarmed, and went right to work with intra-uterine injections, using them morning and night for two weeks. If they were omitted she would have a chill and fever, and go into a collapsed condition. I gave stimulating nourishment and tonics. In this case I did not use my double catheter, as some person had appropriated it without my consent. I took two ordinary elastic catheters, one a little larger than the other, introduced them both into the cavity of the womb, connected the smaller of the two with the ear tube of a Davidson syringe and allowed the water to flow back through the larger one. This case went on to a slow recovery, and about a year afterwards I delivered her of a child at full term.

This case, to me, was a grand success, for I have not the least doubt that another week, if not a much shorter time, of a continuance of this septic condition would have resulted fatally.

CASE IV.—June 21, 1881, I delivered a woman after a tedious, but normal, labor, and for a few days every thing seemed well; but one day I found that she had been having a severe chill, high fever, and that her discharges had become very offensive. I gave her quinia in large doses, and resorted to intra-uterine injections, but with varying success. Her stomach rebelled against the quinia, and there seemed to be a high degree of inflammation of the womb and pelvic cellular tissue. I resorted to all means that seemed feasible. At times she would be better, and then she would have a severe chill, high fever, followed by a profuse perspiration, vomiting and prostration. I felt that the time for the use of intra-uterine injections had passed by. I ordered her to be kept on her back, refused to allow her to change her position, gave stimulants and tonics, put a blister over the hypogastric region, and after a long sojourn in bed she made a slow but good recovery. I afterwards learned that in the early stage of her sickness she failed to obey my instructions; that she would get out of bed and do as she pleased. I felt very anxious about this case, for at one time it seemed that she would die in spite of all I could do for her.

CASE V.—About January 1, 1882, a woman called at my office and said that she had skipped her monthly for two or three times, and then had flowed excessively and suffered much pain; that there was more or less discharge, and she wanted to know what was the matter with her. I made an examination, and satisfied myself that she was pregnant, then introduced a vaginal speculum, and found quite an unhealthy appearance of the neck of the womb. I informed her of the condition, and tried to ascertain from her if she had not made an effort to produce a miscarriage. This she firmly denied, but said that she had fallen down the back stairs, and attributed much of her trouble to that. I gave her an ounce bottle of fluid extract black haw, with directions for using it, and requested her to report at the office in a few days. A few evenings afterwards I was summoned to her presence in great haste. Being ill at the time, she was seen for me by another physician. He said that she flowed profusely, that she was delivered of a dead fœtus, that it had apparently been dead for some time, and that the placenta did not come away. I did not see her for two or three days, and when I made my first visit I found she was not progressing very well. The placenta evidently had not come away, but as she had passed

some large clots she thought it had come from her in pieces. I ordered vaginal injections of carbolized water, but the next day, being still worse, I made an examination, and found a large mass of placental tissue still in the cavity of the womb. I succeeded in removing a large quantity of very offensive and decomposed placental tissue, and followed it up by a large quantity of carbolized water by the intra-uterine method, and after the severe storm there was a calm. For the next day her temperature went to normal, and she felt quite like herself again; but this calm was of short duration, for it was followed by another chill and a high fever. A consulting physician was called by request of the family. He advised me not to use the intra-uterine injections, and, feeling myself that they might not be of much service, I let them pass. She gradually grew worse and died. I think this was hardly a fair case to test the curative properties of a a disinfectant to the uterine cavity. I afterwards learned that she had been operated on by some abortionist, and it is probable that the condition that I first saw her in at the office was a direct result. I gave to this case a great amount of time and attention, and when using the injection I did it faithfully and at regular intervals. Her condition was thoroughly septic, having the severe diarrhœa that usually accompanies this state, and which seems to be an effort on the part of nature to eliminate the poison from the system. Her stomach was also rebellious, and of course this interfered with her proper nourishment.

Case VI.—The next case that came under my observation occurred in April, 1882. In this case there was a perfectly normal labor, but somewhat tedious. I was very careful that every thing came away as it should, and that there should be no chance for trouble to follow; but it seems that sometimes when we try to do our best, bad luck attends us. This patient went along tolerably well for about two weeks, when, after an imprudent amount of exertion, she started to flow, and then suddenly stopped; a severe chill and a high fever followed, and the discharges became offensive; she gradually grew worse, one chill followed another, her temperature became quite high, her pulse rapid, and I had a thorough case of septic fever. Not being discouraged by the result of the last case reported, I again resorted to intra-uterine injections; they seemed to be of but temporary service. I prolonged them until the water came away clear and free from all foreign materials. But one day

she had a chill, more severe and of longer duration than any that had preceded it. I now became alarmed, and, still having faith in this line of treatment, I resolved to try another disinfectant, and having had considerable experience in the sick-room with Bromo-Chloralum, made by the Tildens, I resolved to give it a trial. I used it liberally, one part to seven of water, and, to my surprise and delight, she never had a chill from the time I used the first injection. She commenced to convalesce immediately, and she made a speedy recovery.

This completes the list of cases reported last year. From that time up to January 6, 1884, I did not see a case of that nature.

CASE VII.—On the date last named I was called in haste to see a lady who said that she had been having chills since the morning of the 5th, and her condition as it presented itself seemed one of great prostration. I made an effort to seek out the cause, this effort not being aided by the patient; but I had fresh in my mind the fact that in April last I had been called in haste to find her in the midst of a miscarriage. I surmised that I might again find a condition of that nature. I insisted on making a digital examination, and found an elongated cervix, hard and not open enough to admit my finger, but on withdraw ing my finger I found, from the nature of the adhering material, what seemed to leave no doubt that her chills were of a septic nature. The womb was larger than normal. I then told her that I thought that she had been pregnant, and from her husband and a lady in the same house ascertained the following history: She had skipped her monthly for two or three times; had, as she said, at times a little show, but not natural. On December 24, 1883, had flowed quite freely and then ceased until January 3, 1884, while visiting her neighbor up stairs, she was taken with profuse flowing, but it stopped of its own accord, and she had not seen any thing since. On January 5, 1884, she had a severe chill at 4:30 P. M., lasting half an hour, vomited and bowels loose. January 6, 2 A. M., another severe chill, half an hour in duration, vomited; at 7 A. M. severe chill of half an hour in duration, vomited and bowels very loose; 2:35 P. M., another chill, very severe with vomiting; at 5:30 P. M., still another chill with vomiting, and purging. I first saw her at 6 P. M. She was not then fully out of the chill, and vomited during my presence. She said that she had not been able to retain any nourishment for two days, her temperature was between

104–5°, pulse 130, feeble. I ordered a vaginal injection of lukewarm carbolized water, and made an effort to settle her stomach. At 11 P. M. no more chills; gave a hypodermic of morphia and ordered stimulants. January 7, a chill at 7 A. M., not quite as severe, had rested some, temperature 101°, pulse 125; she felt better, but very weak. I ordered a continuance of the carbolized vaginal injections, and left an explicit request that if she had another chill to send for me at once. I was summoned at 5:30 P. M., and found her in a terrible chill; wishing to wait till it subsided before I resorted to any thing different in treatment, I left her until 8 P. M. Her chill had lasted two hours, and it really seemed to me like an anxious case. Made a vaginal examination, found that she was flowing a little and that the neck of the womb was softening; introduced a dull curette and found placental tissue; some pieces of it came away, and were quite offensive. I gave her an intra-uterine injection of bichloride of mercury, sixteen grains to the gallon of hot water. I had a double purpose in this — first, to destroy, as far as possible, the septic material, and by hot water to produce contraction and to soften the neck. It answered its purpose well. At 11 P. M. she had rallied a little and had retained some stimulants. I introduced my index finger, and proceeded to extract the placenta. I had more than the usual amount of difficulty; attachments seemed to be firm at upper part of the cavity. I gave whiskey hypodermatically and also by the stomach, but, in spite of the stimulants she swooned and became pulseless. I made vigorous efforts at resuscitation, and she revived. I succeeded in removing the placenta, taking a long time for it, as the patient's feeble condition demanded. Then I gave another hot injection of the bichloride solution and a dose of ergot, ordered stimulants freely and left her about 1 A. M., January 8. At 9 A. M. found her comfortable, no longer sick at her stomach, the bowels had ceased running off, temperature normal, pulse less rapid, was able to retain nourishment and in better spirits. I gave another intra-uterine injection; saw her again in the evening and repeated the injection. January 9, repeated the injection morning and evening and ordered a tonic. January 10, still improving, two injections. January 11 and 12, the same treatment. January 13, one injection. January 14, one injection. From this time I ceased using the intra-uterine injections, and had the nurse give hot vaginal injections of carbolized water. January 18,

she is feeling quite well, still weak, but rapidly gaining strength. I left her, with instructions to continue hot vaginal injections for some time, also to continue the tonic till she had regained her strength.

In the last two cases I did not use two catheters, but simply introduced one, and I think if the neck is open sufficiently to permit the escape of the fluid that there is little danger.

There is only one point that I wish to call attention to, and that is the necessity, in intra-uterine medication, of having the work done by a skilled hand. Trusting to nurses, as we ordinarily find them, is worse than folly, and the duty devolves upon the physician to administer the intra-uterine injection himself.

DISCUSSION.

Dr. J. P. Boyd: A great deal of interest has been manifested in the disease which forms the subject of the paper, on account of the articles recently written by Professors Thomas and Partridge. There has heretofore been much objection to intra-uterine irrigation, but the very marked success obtained by this method in the use both of carbolic solution and a solution of the bichloride of mercury has done much to remove the objection. A single injection of the carbolic solution will, in some cases, bring down the temperature quite decidedly, while in others this treatment will have to be persevered in for days. This solution in some cases proves irritating, and to some patients it is very offensive; in these cases the solution of the bichloride of mercury is serviceable. In regard to instruments, the glass tube of Chamberlain is no better than others, and is open to the objection that it is liable to break. In all these cases it is essential to have the os well dilated; if necessary, use Barnes' dilator. The physician ought always to make the injection himself; nurses are apt to press the instrument against the fundus, and by this means produce irritation. By the exercise of care much of the danger may be obviated.

The article by Prof. Thomas has caused much comment on account of the antiseptic precautions advised in it. Dr. Thomas requires the disinfection of the nurses, instruments bedding and all surroundings, such as walls, curtains and carpets. While this may seem unnecessary, it shows the tendency of he times.

Dr. Cook: Have the results of the carbolic solution been as uniform as under the use of the bichloride? In some cases I have failed with carbolic acid, a result which I attribute to a lack of germicide properties in the drug. In cases where it failed, Bromo-Chloralum has given good results.

Dr. D. C. Case: What does Dr. Cook consider large doses of quinine in these cases?

Dr. Cook: Fifteen to twenty grains. I would not advocate the use of quinine to reduce the temperature, for in my experience it did not effect the eduction. I have more confidence in whiskey and the free use of disin-

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fectant injections. For this purpose the bichloride of mercury is perhaps the best; it is clean, not unpleasant to the patient, and, while sometimes it is irritating, the effects can generally be regulated, and by having the os well dilated, to insure a free return of the fluid, there is but little danger attending its use.

COMMON SENSE IN THERAPEUTICS.*

BY GEORGE E. GORHAM, M.D., ALBANY.

In studying the law of reproduction in the animal or vegetable kingdom, we find that two factors are necessary to produce, from one, another of its kind.

For the first factor, in the plant, we have the seed or germ; in the animal, the egg or ovum.

For the second factor, in the case of the seed, a genial soil for its development, involving heat, light, moisture, and the salts extracted from the earth. In the animal, especially mammals, the protection, warmth and nourishment furnished by the body of the parent mother. With these two factors a plant can be grown or an animal reared. If we take away either one, the other is powerless to reproduce its kind.

What is true of plants and animals is also of many diseases. We have the seed, or, in other words, the disease-producing germ, which we call the exciting cause, for one factor; and a genial soil for its development, which we designate the predisposing cause, for the second factor.

The seeds of both plants and diseases have regular periods of incubation, after which they develop, grow into maturity, then decay and die. The kind of disease, like the plant, depends wholly upon the kind of seed, the development depending much upon the soil in which it grows.

Much may be said showing the analogy between the growth of vegetable seed and the seeds of disease; how each produces its own kind, how each has its limited time of incubation, and how each is dependent upon certain laws and conditions for its growth.

We have stated that two factors are necessary for the growth of animals and vegetables, and also for the development of disease; and that if one factor is wanting, the other becomes inert.

* Read before the Medical Society of Northern New York.

Hence it must follow that if, in treating disease, we destroy one factor, the disease does not develop.

Viewed in this light, two distinct methods of treatment can be recognized as successful and scientific, namely, that which kills the seed or germ, and that which removes the predisposing cause, or the favorable condition for the development of the seed or germ. I believe diseases are daily treated, successfully too, by each method.

It is proven, beyond a doubt, that vaccination removes the predisposing cause, the favorable condition, for the development of small-pox in the human system. It is the rule that patients have scarlatina, measles and many other infectious diseases but once, for the reason that that condition of the system which is favorable to the growth of the disease germ has been eradicated. On the other hand, no one can doubt that if the disease germ of small-pox or scarlatina is not applied to the patient he will never have the disease. To prove my assertion that diseases are successfully treated by each method, let me state a few facts bearing on this point.

Scabies, for instance, being a parasitic disease, is quickly and permanently cûred by the germicide sulphur. Apply the sulphur, kill the germ, and the disease, once so troublesome, is at an end. Intermittent fever, though we cannot see the germ, is no doubt caused by a vegetable parasite, and quinine, a powerful germicide, is its destroyer. Salicylic acid in rheumatism, mercury in syphilis, salicylate of soda in typhoid fever, all work upon the same plan.

It is plain to see and therefore easy to believe these effects. But the treatment of the predisposing cause is not so plainly seen, therefore not so readily believed or understood. It is none the less true, however, and it is successful and scientific. Thus, the removal of the predisposing cause is effected by virtue of the law of *similars* — a law once doubted, but now acknowledged, both in theory and practice by many of the most careful and scientific therapeutists of the medical school of the present day. Bartholow, Ringer and Phillips tell us that small doses of mercury will cure bilious diarrhœa; that ipecacuanha will cure vomiting and mucous cough. The fact that small doses of digitalis will prove a stimulant to the heart is as well known as that large doses will depress its action. The late Dr. Beard said that there was no opiate which would so quickly allay vesical irritation as

small doses of cantharides. Who does not know that large doses of these drugs will cause similar symptoms and troubles? Hundreds of medical men whose honesty and ability cannot be questioned, tell us of unmistakable curative results obtained by prescribing in small doses the remedy which, if given in large doses, would produce symptoms similar.

How this is done, what the *modus operandi* is we do not know. Neither do we know why vaccination prevents the patient from taking small-pox. We know that we introduce an agent which will produce a similar set of symptoms, and that the effects of its operations in the system are such that the small-pox germ does not develop.

In prescribing according to the law of similars we select drugs which have the power of producing a similar set of symptoms, as, for instance, cantharis in cases of strangury and ipecacuanha for vomiting.

We do not know enough of the etiology of peritonits, meningitis, dysentery, croup or pneumonia, therefore cannot apply the germicide. But by carefully directing our efforts to the removal of the predisposing cause — in other words, the second factor — and selecting from such drugs as aconite, verat. viride, arsenicum, mercurius, phosphorus, bryonia and spongia, applying each according to its pathogenic indications, we obtain as successful results as when we apply the germicide in ague or itch.

I ask, Mr. President, if this is not a rational view of therapeutics. Shall I call my brother physician a quack because he cures ague with quinine and I cure the same disease with natrum muriaticum, ipecacuanha, nux vomica or eupatorium?

Another point. I am told that some of the old members of this society have withdrawn because the name "homœopathic" has been omitted from its title. Is there nothing in the science of medicine but homœopathy or allopathy? Would that the blinding scales of illiberality might drop from the eyes of medical men. Would that adherence to sects and creeds and dogmas might have less influence, and that all medical men might, without prejudice, become earnest seekers for truth.

Who shall be first to find the undisputed bacteria that produces diphtheria, and also its germ-destroying drug? Who first to tell us how to eradicate the predisposing cause of phthisis or Bright's disease? Here are unexplored fields for the greatest and best, where bright laurels will be won during the next

decade, while the contestants for creeds and pathies, codes and potencies, will have been forgotten and trampled out of sight by the steady march of medical science.—*N. Y. Med. Times.*

ABSTRACTA.

ONE fire burns out another's burning;
One pain is lessened by another's anguish;
Turn giddy and be holp'd by backward turning;
One desperate grief cures with another's languish;
Take thou some new infection to thine eye,
And the rank poison of the old will die.
—*Romeo and Juliet*, 1: 2.

PANNUS TREATED WITH BLENNORRHOIC PUS.—Simi says, in view of the excellent result frequently obtained, so powerful a remedy should not be simply discarded.—*Med. and Surg. Rep.*

JEQUIRITY, in thirty cases (M. Valley), gave results marvelous in twelve, good in ten, worthless in five or six.— *Weekly Medical Review.*

A CASE OF TRACHOMA.—Dr. E. P. Brewer, Norwich, Conn., treated a case of trachoma with jequirity, after five years of treatment had failed. Three applications of a one per cent. solution were made under and upon the lids each day for three days. On the third day, temperature 100°, pulse 90; on eighth day granulations mostly absent.

The progress of the disease is described in detail up to the sixty-seventh day, when "the cornea is still hazy and one blood vessel is visible in its substance. Some thickening of the lid remains. The palpebral conjunctiva is smooth and vivid in appearance, daily losing the deep red hue. The ocular conjunctiva is normal in aspect, yet on slight expsoure shows some evanescent injection." The doctor pronounces the case cured.—*Therapeutic Gazette.*

SUBCUTANEOUS injection of jequirity infusion (M. M. Cornil and Berlioz) in frogs, rabbits, etc., produced phlegmons and gangrene; microbes were found in all tissues but the cornea, and were eliminated by the kidneys and intestinal mucous membrane. If the animal survived, a second injection produced no result—the first had the effect of a vaccination. Jequirity in the food does not produce infection.—*Med. News.*

To VACCINATE or not, that is the question!
Whether 'tis better for a man to suffer
The painful pangs and lasting scars of small-pox,
Or to bare arms before the surgeon's lancet,
And, by being vaccinated, end them. Yes!
To feel the tiny point, and say we end
The chance of many a thousand awful scars
That flesh is heir to — 'tis a consummation
Devoutly to be wished. Ah! soft, you, now,
The vaccinator! Sir, upon thy rounds,
Be my poor arm remembered.

—*Dr. J. F. Edwards, in Punch.*

VACCINATION of a child, Dr. S. S. Purple relates, had been ordered for a certain day, but for some reason was postponed. Precisely eight days thereafter the child was taken with erysipelas at the left deltoid insertion and died.—*Dr. F. P. Foster, in N. Y. Med. Jour.*

ATTENUATION OF VIRUS.—Pasteur effects an attenuation of "rouget" of pigs; rabbits inoculated with the bacillus of "rouget" sicken and die; but if a pig is inoculated from a rabbit at the end of an inoculated series, the pig has a mild disease and is exempt from "rouget." In the same way variolous virus is believed to be attenuated in passing through a series of cones, and inoculations of cow-pox in the human subject produce the attenuated variola called "vaccinia." Pasteur has worked his problem in the opposite direction, and has discovered that the inoculation of the "rouget" through a series of pigeons develops intense virulence.—*Phila. Med. and Surg. Reporter.*

ASEPTIC VACCINE.—Pott (*Archiv. f. Kindhlkde*) infers, from experiments with vaccination lymph mixed with equal parts of carbolic acid solutions of the strength of from one to five per cent. and solutions of salicylic acid (1:300), boric acid (35:100), and thymol (1:1000), that however aseptic a vaccination mixture may be, its usefulness is lessened, after the first few weeks, the longer it is kept; or, in other words, antiseptics do not preserve vaccine lymph. Aseptic lymph is fluid, free from fibrinous clots, and will go twice as far as the unmixed variety.—*Archives of Pediatrics.*

CHILDREN are kept from school in France forty days after having had small-pox, measles or diphtheria, whether light or severe; twenty-five days after mumps or varicella; finally, they are bathed with soap and their clothing disinfected.—*Canada Lancet.*

SCARLATINAL INOCULATION VIA THE HORSE.—In *Gaz. Med. de Paris*, September 29, M. Stickler reports inoculations with nasal mucus of a horse suffering with a disease believed to be identical with scarlatina; and concludes that subcutaneous injection of scarlatinal virus from the horse is not harmful, that inoculation of this virus in man is followed by a circumscribed eruption resembling that of mild scarlatina, and that this inoculation confers immunity against scarlatina.

PROF. TYNDALL says: "Reasoning from analogy, I venture to express the opinion that the rarity of second attacks of communicable disease is due to the removal from the system, by the first parasitic crop, of some ingredient necessary to the growth and propagation of the parasite." There are crops which can be successfully grown on the same soil year after year; and we find in disease limitations of Prof. Tyndall's theory. Still, it has been proven that many diseases are due to infection by micro-organisms, and Prof. Tyndall suggests, "in anticipation of the assault of infective organisms, the experimenter will try to introduce into the body substances which, though small in amount, shall so affect the blood and tissues as to render them unfit for the development of the contagium." [Compare this with "Common Sense in Therapeutics," page 104.] "Dr. Polli, of Milan, finds that alkaline sulphides introduced into the body act powerfully on the contagia of marsh-fever, typhoid, miliary fever, puerperal fever and small-pox."—*New England Medical Gazette.*

HYDROPHOBIA, said Pasteur, at Paris Academy of Sciences, on February 26, can be communicated to a dog by inoculation with fragments of marrow or of nerve taken from a mad dog. He has made twenty dogs proof against the disease by inoculation with modified virus.—*Brit. Med. Jour.*

ADDER'S POISON IN YELLOW FEVER, HYDROPHOBIA AND TETANUS.—Baron Humboldt's nephew (*Medical Digest*) inoculated fourteen hundred and thirty-eight persons with virus of the adder, (*vipera berus*) attenuated by passing it through putrid liver, as a prophylactic against yellow fever; only seven afterwards took the fever, and these recovered.

Dr. Richard Neale recalls experiments of inoculating, in 1874, with adder's venom in cases of hydrophobia, a disease allied to tetanus, for which the virus had been recommended.

VENOM of the rattlesnake (*crotalus durissus*) is reported by Dr. A. O. Amedem, of Glens Falls, N. Y. (*Med. News*), to have relieved a case of severe tetanus.

A VENOMOUS snake bit a Siamese man on the toe. A hen was quickly found and the injured toe was inserted into the cloaca. The poison was rapidly absorbed by this intestinal pouch, and the hen died in a few minutes. The man did not suffer from the bite.—*E. A. Sturge, Medical Missionary, Siam, in Phila. Med. Times.*

YELLOW FEVER.—Dr. de Lacaille, Rio Janerio, cured thirty-eight consecutive cases with phenic and sulpho-phenic acid, and, in grave cases, phenate of ammonium, given orally and, in advanced stages, hypodermatically.—*Med. and Surg. Reporter.*

CORROSIVE SUBLIMATE.—The antiseptic virtues of this drug were first made known by R. Koch. Tarnier employs it in his maternity hospital. Every attendant on entering the ward must wash the hands and arms in a solution of corrosive sublimate (one in one thousand). The patient's genitals are bathed in a solution of one part in two thousand; this is the strength for vaginal injection. Billroth employed it as a surgical dressing (one in five thousand) in a case of suspected anthrax.

CHAS. AM. ENDE, chemist, Hoboken, N. J., proposed the antiseptic now in use in use in New York hospitals — chloride of sodium and bichloride of mercury solution.—*Medical Record.*

CORROSIVE CHLORIDE OF MERCURY IN DIPHTHERIA.—To children of less than ten years are given from one-sixteenth to one-twelfth grain doses of the corrosive chloride, every four hours, until arrest of the diphtheritic process, which is, as a rule, after a few doses. If ptyalism occur, the remedy should be abandoned, but while there exists any diphtheritic virus in the system salivation is not apt to occur.—*Ther. Gazette.*

CORROSIVE SUBLIMATE IN DYSENTERY.—This remedy, in half-minim doses of the liquor hydrargyri bichloridi of the British Pharmacopœia, administered hourly, speedily and infallibly cures dysentery (barring the tropical and infantile forms), according to Dr. March, in the *London Medical Times and Gazette.*

QUININE MASKED BY COFFEE.—Finely ground roast coffee, four ounces; alcohol, one ounce; sugar, twelve ounces; boiling water sufficient. Pack the coffee in a percolator provided with a

cover; pour on boiling water until eight ounces are obtained; dissolve the sugar in the percolate by percolation, and add the alcohol as a preservative. Two grains of quinine are covered by a drachm of syrup.—*New Remedies.*

TASTELESS QUININE.—℞: Quin. sulph., gr. xiii; ac. tannici, gr. vii; sodæ bicarb., gr. x; syr. q. s. ad ℥ ii; ol. gaultheriæ, gtt. x. M. S. Teaspoonful every four hours followed by a draught of water. Shake the mixture before using. To this may be added bismuth sub. carb., ipecac, opium, podophyllin, leptandrin, etc. Any addition containing alcohol immediately returns the bitter taste.—*Med. and Surg. Reporter.*

QUININE FOR CHILDREN can be given per rectum, but many patients object to that method. Syrup of yerba santa is a fraud; it prevents immediate taste, but leaves a nauseating bitterness. Coffee is but little better for a child. The syr. glycerrhiz. co. is bulky. We suggest to press the powder into the smallest bulk, drop half a teaspoonful of the tenacious part of the white of egg, place the powder on it carefully, cover it with another drop, so as to envelope the powder without letting it touch the spoon. If carefully done, it can be satisfactorily given. The white of egg possesses anti-emetic properties, and is cooling and soothing to a sensitive stomach.—*Dr. F. E. Daniel.*

QUININE IN EXCESSIVE SWEATING.—Dissolve one drachm in a pint of alcohol and sponge the skin.—*Med. and Surg. Rep.*

QUININE BY INUNCTION.—Dr. D. V. Wale writes, in *St. Louis Courier of Medicine*, that in 1872 Prof. L. P. Yandell advised to mix quinine with lard and rub it into the skin. After quinine in the so-called tasteless mixtures and per enema had been often rejected per orem and per anum in children, he tried inunction, but, on account of Prof. Bell's argument, with no faith in it. [The *Louisville Medical News* gives the view of Prof. Bell and Michael Foster: The balance of conflicting evidence favors the view that soluble non-volatile substances are not absorbed by sound skin; that volatile substances, as iodine, are absorbed, not through the skin, but by respiration. Abraded surfaces absorb aqueous solutions; and solid particles, with a *fatty vehicle, rubbed into the skin* (as mercury ointment), find their way into the underlying lymphatics.] After using quinine inunction in *over one thousand cases*, the most of them younger than one year, Dr. Wale concludes: The younger the patient, the more sure the

results. The amount required is three times the dose per orem. A younger infant requires a larger dose in proportion to its age than an older one. If the ointment is put on a band around the body, the band, and not the baby, absorbs the drug. Mix the quinine with a teaspoonful of lard [or vaseline]; divide into three parts; rub on the inner side of thighs and groin, one part every two or three hours; the inunction must be completed several hours before a paroxysm.

As regards enematas, an acid solution is generally expelled; if no acid is used, part of the quinine remains in the syringe, and part lies in the rectum until expelled. Hypodermatics are needless and impracticable.—*Louisville Med. News.*

[Oleate of Quinine (25 per cent. alkaloid) is elegantly prepared by Parke, Davis & Co.]

PURPURA, from one grain of quinine, is reported in the *Boston Medical Journal* by E. Wigglesworth, M.D.

TRICHINOSIS (*Le Prog. Med.*) is much more commmon in Germany than in France. The outbreak at Emmersleben, Saxony, Bronardel and Graucher investigated on the spot. A Saxon pig was killed on September 11, and was examined by two inspectors, who found no trichinæ and who ate of the flesh. The inspectors and all who had eaten of the meat raw, a day or so after purchase, were affected in greater number and died in larger proportion than those who ate of it later. The mortality was thirty-three per cent. of those who ate it on the second day after killing, dropped to ten per cent. in those who had not used it until the fifth day and to zero in those who had not eaten of it until the seventh day. Trichinæ therefore lose their vitality in meat left to itself and neither smoked, salted nor cooked. Two hundred persons who ate the cooked meat were not in the least affected. The ingestion of alcohol in considerable quantity may prevent the injurious action of trichinous meat, since a man who ate three-quarters of a pound of infected meat and then drank about three pints of whiskey escaped from the trichinosis which affected his companions. The Saxon epidemic was not due to American meat.—*Polyclinic.*

VIRCHOW says that the shutting out of American pork from Germany is a political, not a sanitary, measure.

TRICHINOSIS cured by alcohol, by Dr. D. Vincente Ferrer (*Gaceza de los Hospitales, Valenica*). Patient was twenty-three

years old; treatment commenced in fifth week of attack. Pulse 124, temp. 103° F., muscular pains and rigidity. Six ounces of proof spirit (fifty-six per cent. alcohol) were given daily in sugared water. In twenty-four hours temperature fell eight degrees, and rigidity was diminished. On sixth day the patient was free from pain as he lay in bed, and could move some limbs without suffering. Was well in eighteen days. Maximum quantity of spirit well borne in a day was nine ounces.— *Weekly Med. Rev.*

How to Look for Trichinæ.—Dr. F. L. James (*St. Louis Med. and Surg. Jour.*): Avoid too high a power. A two-inch or one-inch objective, with a B or A eye-piece, giving thirty to fifty diameters, enables the observer to focus deep and take in a wide field. Cut the sections longitudinally, not very thin (1-100 of an inch). Cover with acetic acid in a watch glass. In a few minutes, when transparent, place on the slide, drop on glycerine and adjust a cover-glass. Sections with fatty spots should be cleared with alcohol and oil of cloves and mounted in balsam. Let sections remain in glycerine, under light pressure, a few days before mounting either in balsam or glycerine.

Antiseptic Inhalation.—A lamp heats a metal tube coiled in a tin boiler; air passes into the free lower end, and from the free upper end of this tube is conducted hot through a receptacle filled with dry medicated tow, and through an inhaling tube with valves to the mouth.—*Med. and Surg. Reporter.*

The Tubercle Bacillus Agitation.—Dr. Austin Flint, Sr., agrees with Koch that the bacillus is not merely one of the characteristics of tubercle, but that it is its one specific contagious cause.

Dr. H. F. Formad, of Philadelphia, says: "To-day, while the bacillus is acknowledged as a common morphological concomitant of tubercle, pathogenetic properties are denied it, on account of a want of sufficient confirmation of the evidence." "Tuberculosis may arise from other causes. The bacillus may be one of the causes, conditionally, but it is not the cause. The question of predisposition stands in the way of the bacillus theory. Furthermore, I will try to show that, *tuberculosis is not a contagious disease.*" Koch and others who believe in the contagiousness of tuberculosis "disregard, as a rule, the negative evidence." "Tuberculosis cannot be produced" in some animals

nor in some persons, although every individual is liable to acquire syphilis, small-pox and other contagious diseases. A special predisposition and a special individual are required. In such an individual a simple inflammation, resulting from any cause whatever, can produce tuberculosis," although "bacilli may act more readily than other irritants." "Predisposition" is admitted by Koch and by Flint, but Formad defines this term as not merely a peculiar soil suited to the bacillus, but a condition of embryonic tissue development, and that in an animal whose tissues are of an embryonic character tuberculosis is set up by any irritant. "Tubercle is primarily a simple granulation tissue of inflammatory origin." "Phthisis is a local tuberculous inflammation of the lung, which may manifest itself in various ways." "Lesions representing the different forms of phthisis, and their transition from one form to the other, are often seen in the same lung. Virchow insists that nothing should be considered tubercular unless it shows true tubercle nodules, and hence he does not recognize cheesy pneumonia as tubercular, although he does not object to the term 'phthisis' for this lesion." But "if we consider the presence of the bacilli of Koch as the differentiating point between what is tubercular and what is not, we find that catarrhal and cheesy pneumonia *are the most tubercular of all*, because they contain, as a rule, more bacilli."

Tubercle may exist without a bacillus. George M. Sternberg, Heneage Gibbs, T. M. Prudden (New York), Spina, Cornil and Babes, Malassoz and Vingal, Fraentzel, C. Macnamara, George Bodamer, Dr. Lawrason (New Orleans), Weigert, Bollinger, Baumgarten, Ziel, Councilman, Schuchart and Krause, and Koch's own assistants have recorded "examinations of tuberculous tissues for bacilli with negative results." Koch states himself that he "supposes that his bacilli, even if they escape observation, are still present in all tubercles; but he says again that he "recognizes only such structures as tubercular which contain his bacillus!"

Dr. Formad admits that the presence of bacilli in sputum is a valuable *diagnostic* sign of tubercular disease of the lung, but the quantity of bacilli found does not indicate the degree of disease, and is *not prognostic*, and the absence of tubercle bacilli in sputum is *no proof of the absence of tubercle* in the lung.

Lupus is a local tuberculosis, say Friedländer, Volkmann and others, while Virchow and others think it is not. Dr. Robert B. Morison (*Am. Jour. Med. Sci.*) concludes that the presence of tubercle bacilli in lupus is not proven.

Speria, of Vienna, has found bacilli like Koch's in the spittle of croupous pneumonia and of bronchiectasis, in caseous pus, etc. Rosenstein has found them in urine. Speria states that bacilli of tubercle are only found in tubercular or caseous deposits *after access to the air*, that they are *not the essential cause* of the disease, nor do they appear in all cases in its *incipiency*.

Bacilli, not distinguishable from tubercle bacilli, have been found in lupus, leprosy, the false membrane of diphtheria and scarlet fever, in syphilis of the lung, in the fæces of non-tubercular and tubercular persons, alike, and in the marshes of Pesth. Hence the *tubercle bacillus is not peculiar to tuberculosis*.

Contagion and Infection.—Virchow says, that tubercle and caseous pneumonia are not both *tubercular*, but both may be *bacillar*, just as a gumma and an erythema syphiliticum are distinct, yet both due to syphilis. He is thus allied to Dr. Flint in acknowledging the etiological significance of the bacillus. He believes that the bacillus of Koch is not infectious, and distinguishes contagion from infection. Thrush, scabies and the aspergillus (a fungus common in birds), illustrate contagion; "the aspergilli grow at the point of inoculation and spread to other organs, giving rise to metastatic changes there also, but there is never any dyscrasia or toxic infection of the whole body. Splenic fever is taken as an illustration of an infectious disease. Here the fungi do not act mechanically nor by their simple presence, but upon the tissues of the body, thus giving rise to toxic products. The inoculation of the blood of animals with splenic fever will set up the worst form of this disease, although not a single bacillus anthracis is demonstrable, and Prof. Roloff has just confirmed this observation. Of these two processes the difference is obvious by the results of a second inoculation, which will be successful with the apergilli, but will fail in the case of splenic fever. We have every reason for suspecting that the bacillus tuberculosis acts where it is, and not upon remote regions."

RAULIN found that one part in 1,600,000 of nitrate of silver added to the culture fluid of aspergillus niger entirely stops the growth of the plant.

Tubercle Inoculation.—Dr. Falk, of Berlin, answers the question whether animals inoculated with tubercle are rendered insusceptible to a recurrence of the tuberculous process. Difficulty was experienced in so modifying the material that the first injection should not prove fatal. Heat and chemicals are destructive, and the experimenter had recourse to a natural means of disinfection — that is, organic decomposition. Through continuous moistening of tuberculous tissue, decomposition causes gradual loss of virulence. Such matter, not far advanced in decomposition, was introduced into the peritoneal cavity of animals, causing not a general, but a local, tuberculosis. After the local cheesy abscess from the inoculation was completely calcified, a second inoculation of unimpaired tubercles showed that the first inoculation, instead of being a means of protection, had increased the tendency to renewed disease, by some sort of degenerative influence which it left. "The effect of inoculation is simply cumulative, merely adding to the contagium present, just as planting a number of itch insects over the surface of a person affected with scabies would do" (*Maryland Medical Journal*).

Tuberculosis and Scrofula.—"Waldenberg demonstrated that in 'certain animals' the manner and matter of inoculations are of no consequence. Next, Cohnheim and Frankel proved that in 'certain animals' it was not necessary to inoculate at all; a focus of suppurative inflammation was sufficient to render the animal tuberculous. It seems natural to suppose that tuberculosis is a consequence of their disposition to cheesy inflammation, and that such animals become inoculated from their own inflammatory products" (Cornil and Ranvier).

The tendency of all inflammations in scrofulous persons to run a chronic course, and of exudations to undergo cheesy change, is well known, and the relation between scrofula and tuberculosis is placed beyond question by the investigations of Waldenburg and others. Dr. Formad has said that "the scrofulous habit lies in the anatomy of the connective tissue of the individual, the peculiarity being a narrowness of the lymph spaces, and their partial obliteration by cellular elements." Such beings can have no other than a tuberculous inflammation, though it may remain local and harmless.—*Southern Clinic.*

Tubercular deposits in the lungs of a patient, aged seventy, followed primary local cutaneous tuberculosis.—*M. Hanot, in Weekly Medical Review.*

Koch's Bacillus, Prof. Pick claims, is destroyed by pure aluminium. He gives consumptives pills of metallic aluminium, powdered chalk and extract taraxacum.—*Weekly Med. Rev.*

CREASOTE cures a small proportion of cases of chronic tuberculosis, but is useless in tuberculosis florida. Prof. Bartholow vaporizes it with iodine by means of hot water (120°), and the patient inhales the vapor slowly and deeply from a distance of fifteen to twenty inches from the vaporizer; or, grs. iii–v are given in a pill with tolu, three or four times a day, the dose being gradually increased until the urine is darkened. Its action is thought to be on the bacillus, and is better than carbolic acid.—*College and Clinical Record.*

Some are born to phthisis,
Some acquire phthisis,
And some have phthisis thrust upon them.
Students' Medical Journal.

IODIDE OF POTASSIUM, in cases of contracted pelvis, is recommended by Depaul to be administered during pregnancy, with a view of lessening the size of the child.

IODINE for vomiting of pregnancy, and other forms of emesis, is successful in the hands of Dr. T. T. Ganot, in doses of one drop of the compound tincture.—*Am. Jour. Med. Sciences.*

CONCEPTION of a female child is post-menstrual; pre-menstrual fertilization produces a male.—*Dr. Andrew Wilson, in British Medical Journal.*

FEMALE CONCEPTIONS are attended with constipation, which indicates an absorption of fluids into the circulation. If the blood, therefore, contains more water than in male conceptions, this may explain the longer duration of the lochia. Heaviness of spirits, drowsiness, bad color, indigestion, etc., in pregnant women carrying girls may be due to the attending constipation. —*Am. Jour. Obstet.*

THE PREGNANT UTERUS is probably of higher temperature than the non-pregnant, and of greater temperature with a male fœtus than with a female, particularly before quickening.—*Am. Jour. Obstet.*

VAGINAL PULSE can always be found early in pregnancy, to the right, left and in the middle of the cervix. In healthy non-pregnant women it can only be felt when in a state of orgasm, but then all other symptoms of pregnancy are absent.—*Prof. Osterich, Dresden; Canada Lancet.*

POST-PARTUM INJECTIONS.—Hot water, 112° to 115° F., is the most prompt and certain of all means advised for the stopping of post-partum hemorrhage. It regulates irregular uterine contraction, causes no shock, and avoids all the dangers arising from introducing the hand into the vagina, or from the employment of astringents.—(*Philadelphia Medical Times*, December 16, 1882). We are reminded of a remark of Prof. B. F. Betts, M.D., that too violent or too prolonged hot water injections may produce serious symptoms by driving the blood out of the uterus into the large vessels, and so endangering the heart.—*Hahnemannian Monthly.*

PUERPERAL SEPTICÆMIA.—Iodoform, five drachms; gum arabic, starch and glycerine, each half a drachm. Make into three suppositories about an inch and a half in length. These are passed into the uterus by forceps. Iodoform adheres to wounds, is insoluble, of slow vaporization; hence it continues to act for a long time, and renders unnecessary the frequent irritating disturbance of the parts, unavoidable in treatment by intra-uterine injections.—*Dr. W. Gardner and Dr. T. J. Alloway, Canada Med. and Surg. Jour.*

THE PREVENTION OF PUERPERAL FEVER.—There has been a time when every thing was vigorously scrubbed, no pictures adorned the walls, no carpet decked the floor, and carbolic acid was used without stint, but I have never observed that these precautions exerted the slightest influence in the prevention or the stamping out of puerperal fever.

The fumes of sulphurous acid have since been substituted for the old-time scrubbings with the best results, and I would strenuously recommend the modes of disinfection employed by the Board of Health in all cases where there had been previously scarlatina, diphtheria, typhoid or erysipelas in the household. In this connection, I would state that a woman never ought to be confined in the room adjacent to the bath-room, as I believe that puerperal women are extremely sensitive to sewer-gas poisons.—*Prof. Wm. T. Lusk, in New York Medical Journal.*

PUERPERAL FEVER (Obstet. Soc. Edinburgh) is believed to have been traced to want of cleanliness on the part of the nurse who happened to be menstruating at the time.—*Md. Med. Jour.*

PLACENTA RETAINED, A TAMPON AGAINST HEMORRHAGE.—The *New York Medical Journal* extracts from "Centralblatt für die gesammte Therapie" the report of a case of Dr. E. Thomann's, where the contracted uterus suddenly relaxed and lay like an empty bag within his grasp, as he was about to remove the placenta, which was partly in the vagina. Not a drop of blood escaped. As a tampon against secondary hemorrhage, the placenta was allowed to remain. After sixteen days it was removed with difficulty, but without loss of blood.

THE combined method of turning in placenta prævia (Dr. C. Behm, in *Ztschr. f. Geburtshülfe u. Gynäk.*) avoids sepsis and loss of blood by means of the tampon formed by the child's breech. He differs from Spiegelberg, Fritsch and others in their view that extraction should be immediate. He has waited eleven hours between turning and extraction. In the internal the patient should be reinforced with stimulants rather than transfusion. His aphorism is, *haste, with delay* — haste in performing combined turning, delay in extraction.—*N. Y. Med. Jour.*

ADHERENT PLACENTA.—Dr. J. Field, Kansas City, in six cases saved the woman by pumping cold water into the umbilical cord. One patient was in convulsions when the placenta came away.—*The Clinique.*

TARNIER AXIS-TRACTION FORCEPS, in such cases as have "tried all our strength and taxed all our skill, that sometimes baffled us completely, or were terminated by the extraction of a damaged child from a damaged mother," enable us to effect delivery "with less expenditure of energy and with more precise direction of power."

Conclusions: "1. The extraction of the fœtal head through any part of the curved parturient canal demands the use of a forceps having the pelvic curve (curve of Smellie and Levret). 2. Extraction with such an instrument cannot be made without loss of power and misdirection of power, unless the handles have a compensation curve (perineal curve of Johnstone, Morales, Hubert and Aveling). 3. The addition to the blades by a joint or hinge of compensationally curved traction rods gives the possibility of curved axis-traction, while the change impressed

on the direction of the fixed application handles affords an index to the operator as to the line at which at any moment he ought to pull (axis-traction rods of Tarnier)"—*Alexander Russell Simpson, Edin. Med. Jour.*

AXIS TRACTION is applied to ordinary forceps by Dr. J. H. Packard (Obstetrical Society of Philadelphia) by two steel hooks [with arms curved backward in the "compensation" or "perineal" curve] arranged to catch in the fenestræ of the blades of the forceps, and terminating in rings through which a wooden handle is passed.

Dr. A. H. Smith said that these hooks exhibited did not draw from the right point, and would be difficult to adapt when the head was high up.—*Maryland Med. Jour.*

PROF. TARNIER has been appointed professor of obstetrics and diseases of women and children in the Faculté de Médicine, Paris.

LAZAREWITCH'S STRAIGHT FORCEPS WITH PARALLEL BLADES (Massalitinoff, in *Ann. de Gynéc.*).—This forceps avoids the compression inevitable in *crossed* forceps; the maximum separation of the blades at the tips is an inch, without altering the paralellism of the handles. On account of their mobility, the blades can be adapted to the head as well as to the pelvic walls. When the head is in the superior strait, even obliquely, these forceps can be used because of the absence of the pelvic curve. The progressive movements of the head are produced more easily than by a forceps with pelvic curve.—*N. Y. Med. Jour.*

FORCEPS TO THE BREECH.—Truzzi (*Gaz. Med. Ital. Lomb.*) concludes, from experiments on the cadaver: 1. When the buttocks are wedged in the superior or middle part of the pelvis, the forceps is preferable to traction in the groin. 2. Ollivier's method, to apply forceps upon the thighs and upon the pelvis, is likely to injure the abdominal walls and liver. 3. To apply the forceps over the iliac bones is easier and safer. 4. The bite of the blades should reach the level of the iliac crest. He thinks that most forceps are too large.—*N. Y. Med. Jour.*

TONGALINE.—We call attention to the numerous testimonials from reputable physicians in commendation of the new remedy for neuralgia and rheumatism—Tongaline, or Liquor Tongæ Salicylatus. Our readers will note that *this is not a secret medicine*, and its sale is urged only through the prescriptions of members of the profession.

THE MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

F. C. CURTIS, M.D., A. VAN DERVEER, M.D., LORENZO HALE, M.D.,
JNO. BEN. STONEHOUSE, M.D., WILLIS G. TUCKER, M.D.

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THE COHOES RECEPTION OF THE MEDICAL SOCIETY OF THE COUNTY OF ALBANY.

"Dulce est desipere in loco."—*Horace.*

At the meeting of February 27, Dr. J. W. Moore moved that the next meeting should be held in Cohoes. It was on Wednesday evening, March 26, 1884, that the Cohoes meeting, in all its phases — business, medico-literary, social and festive — was consummated.

The business and literary parts will appear in full in the printing of the official minutes. Suffice it is to say that the paper of the evening, read by Dr. John Thompson, of Albany, and illustrated with colored drawings, brought out a discussion of somewhat more than usual interest.

The social element developed later, when the meeting proper had adjourned from the parlors of Harmony Hotel to the large dining hall. By arrangement with the R. & S. R. R., a special locomotive and car awaited the pleasure of the Society to go and come between Cohoes and Albany. Guests were present from West Troy, Green Island, Albany and Slingerlands. Troy, too, was represented.

A sentiment of brotherhood is kindled in any meeting in which all present have a common interest; but when this spirit finds vent in post-prandial speaking, the social kinship of all with the speaker asserts itself with more glowing enthusiasm, and the public feeling — "all allies to each" — melts, for a time, the lesser private circles. So, in that evening in Cohoes, as the "bug buzzed round," and one after another was called upon to speak his views, the fusion of all into one was perfected.

The Medical Society of the County of Albany are indebted to Drs. J. W. Moore, J. D. Featherstonhaugh and C. E. Witbeck, who were the designated committee of arrangements, and all our other confrères of Cohoes, for an evening of pleasure and of profit; and the Society will not forget it. L. H.

THE SYSTEMATIC STUDY OF VACCINE VIRUS.

The attempt has often been made by individuals to determine by comparative study the effect of different kinds of vaccine virus. It may seem, and, strictly speaking, is, a missuse of terms to speak of different kinds of vaccine virus. But it is, no doubt, a common belief that results vary as to intensity of action, perfectness of operation and protectivity, immediate or prolonged, of virus derived from different sources, such as, for instance, humanized or bovine. It is a frequent matter of observation that such variations occur, and they are not all to be accounted for by the environment, for growth in which the germ is planted, although this will make much difference in the results with this, as with all zymotic germs. There are various sorts of virus. There is the mongrel virus, as one may call it, which has been largely used through the country in years past, derived from unknown sources and kept up as a supply by the physician himself, who perhaps remote from any easily accessible depot, has used the crusts taken here and there from the arms of his vaccinees. However one may hold to the unity of the vaccine germ, it is assumable that virus propagated in a manner which depends, in various of its generation links, on an ill-developed case, the not well-matured crust being perhaps often carried in the warm pocket and used for weeks or months as required, without any return being made to the original source, becomes degenerated in character. Then, there is the virus, the culture of which has been carried on of late years as a mercantile venture in such a multitude of centres, through the calf, and generally all asserted to be descended from the "Beaugency" stock. Without adverting to the probable fact that much of this is entirely unworthy, by reason of the careless selection of vaccinifer calves, by the use of the clamp on the vesicles to compel a yield of three or four times as many points, and thereby getting the admixture of foreign matter, or possibly even the use of croton oil instead of vaccine lymph to make a "sore," it is still a

question, which perhaps is not satisfactorily settled, as to what sort of a case that of this noted Beaugency cow was; whether it was a genuine case of spontaneous cow-pox, or one following small-pox inoculation. This is a question for purists now, no doubt, but there is room for purists to study the minutiæ of so important a matter as vaccination. This virus is largely used now-a-days. The search is yet being pushed for a satisfactory case of spontaneous cow-pox, and the culture to be started from such a source. Then, in the third place, it may not be generally known that there has been preserved with the devotion of religious devotees by the Jennerian Society, of England, a humanized virus that dates back to the hand of Jenner. Through all the years since, this has been handed down by weekly insertion into the arms of acceptable children, and each generation carefully recorded. Here we have a distinct thoroughbred virus, always humanized and now nearly a hundred years from the cow. The Beaugency animal virus has with equally scrupulous care been cultivated by a limited number of purveyors. There is not yet unanimity of opinion as to the choice between humanized virus and that direct from the cow. Jenner, no doubt, favored the former, and he has his disciples still. Others believe in always going directly to the prime source. There are also those who believe, with much reason, that between pure humanized virus and pure vaccine, from a certain origin as to spontaneous cow-pox, there is no choice. It is well worthy of investigation whether there is any difference in their respective operation. Do either possess individual characteristics as to evolution of the vesicle, violence of action and protectivity. Such a question one man could not determine in a lifetime, alone, but by coöperation of many observers at remote points the practical use of virus from the different sources side by side through a considerable period of time and the noting of certain points and making record of them the question might be brought to a solution. An attempt at this was begun from the central health board, but as yet has not been brought into practical shape. The questions proposed to be answered in each case were the following:

POINTS OF OBSERVATION AND RECORD OF VACCINATION.

1. Name of vaccinee.
2. Day and hour of vaccinating.
3. Physical condition of vaccinee (inclusive of notes on pulse, temperature and skin) at vaccination and the subsequent times of record.

4. Place of vaccination and at what number of points (the usual place at insertion of deltoid being preferred).

5. Lapse of time to beginning of papulation and redness.

6. Appearance at seventh or eighth day from insertion of lymph (day and hour).

7. Measurements of diameters of vesicles and areolæ respectively.

8. Lymphatic phenomena from beginning to end.

9. Date of detachment of first crust.

10. Appearances and measurements of vesicles and areola may be conveniently and accurately presented by means of outline circles.

The means of salvation from the most undesirable disease that we have in our whole category are treated very lightly by the people and profession. Do we stop to think ever how much this little procedure does for us? It is so common that we take it as the air — we do not consider, as we ought, that it is liable to abuse, impurity, deflection from its true type. How artlessly and confidently the virus is bought at the drug store, without a thought as to its character. It is extraordinary that it has deviated so little from its proper character, has been attended with so little evil, and, with such slack attention by the profession, has wrought so much and held its own. F. C. C.

——Some ten years or more ago, during a small-pox scare, the vaccination corps appointed to serve in the city of Albany had many an amusing experience. One of the most comical occurrences happened in this wise: It was our duty to enter upon our records the name, age, date of vaccination and if it took well, etc., etc.; also to enter on the book all refusals to be vaccinated.

We found a deep-rooted prejudice against being vaccinated with the "dirty black pox," and we fell into a routine way of taking name, refusal, etc., ofttimes without looking very sharply at the individual himself.

In visiting a family living on the "back of the lot," or, as we would say, in the rear, I entered and began my questions, addressing a big, burly Irishman:

"Have you ever been vaccinated?"

"I wuz."

"What doctor vaccinated you?"

"No doctor ivir vaccinated me, sor."

"Then who did vaccinate you?"

"God Almighty vaccinated me, sor."

And, looking up, for the first time I observed that he was deeply pock-marked, being literally covered with pits, his skin looking like a nutmeg grater; and, with a sneer in his eye, he asked me, in rich brogue:

"Did ye think it tuck well, sor?"

—*Dr. Wm. Hailes, Jr., at the Cohoes Levee.*

BOOK NOTICES.

ELEMENTS OF HUMAN PHYSIOLOGY. By Henry Power, M.B., London, F.R.C.S., Ophthalmic Surgeon to St. Bartholomew's Hospital, London, Examiner in the Board of Anatomy and Physiology, Royal College of Surgeons. Illustrated with forty-seven engravings. Philadelphia: Henry C. Lea's Son & Co. 1884.

This work appears as one among a number of excellent scientific, medical and surgical treatises comprising a set of "Manuals for Students of Medicine." It is naturally more or less elementary, as its author observes in the preface, when he says that "its pages have been written with the object of giving to the student a general outline of the physiology of man."

It is divided into sixteen chapters, with both an appendix and index. The first chapter is devoted to an "Introductory," describing the general composition of the body, which the author divides into (1) inorganic compounds, (2) proximate organic compounds, (3) nitrogenous or azotised compounds, (4) non-azotised compounds. Gamgee's synopsis of the chief proteid bodies also finds place in this chapter, and is most acceptable.

The second chapter opens with a concise definition of the blood, with a description of its physical and chemical properties, its spectrum, its quantity, its morphological or formed elements, after which its coagulation is considered more or less minutely.

In chapters III. and IV. may be found many of the latest views upon the circulatory organs, as well as a description of the movement of the blood and lymph through their respective channels. Why it is that the latter fluid is *here* discussed, instead of under the subject of the chyle and lymph, chapter VIII., is difficult to say.

Respiration is very fully discussed in the next chapter. Its object and its nature, and especially the respiratory movements, are clearly, as well as elaborately defined, particularly the sub-

ject of inspiration and expiration, where a table, as taken from Landois, demonstrating the muscles engaged, as well as their nerve supply, is inserted. After describing the mechanism of the respiratory act, follow some admirable pages devoted to its physics and chemistry.

Chapter VI. is devoted to the important topic, "Food;" its uses, classification, value of different varieties, different kinds of drinks, selection, diet and dietaries, balance of the economy.

Stomachal digestion, including mastication and insalivation, beside the digestion of food in the intestinal tract, forms the theme for the next chapter, which covers almost thirty two pages.

The subjects of the "Chyle and Lymph," as well as the "Glycogenic Function of the Liver," occupy the two following chapters, while the tenth chapter is devoted to the "Function of the Skin."

In regular order come two admirable chapters, one upon "Animal Heat," the other upon "The Urine," while in chapter XIII. may be read with unusual interest many of the latest points connected with "Muscular Movement."

"The Nervous System" comprehends one chapter, the XVth, in which may be found physiological considerations upon the cerebro-spinal and sympathetic systems. The "Special Senses" are fully and ably discussed in the following chapter, while the next and last takes up the subject of "Generation and Development."

The Appendix gives a list of many of the more important substances that have physiological relations, and which are not described in the text.

As a whole, the volume consists of nearly four hundred pages, bound handsomly in red cloth (which does not "rub off"), and is of convenient size. F. T., JR.

FAT AND BLOOD. An essay on the treatment of certain forms of Neurasthenia and Hysteria. By S. Weir Mitchell, M.D., Member of the National Academy of Sciences, etc. Third edition, revised, with additions. Philadelphia: J. B. Lippincott & Co. 1884.

That the value of this little volume may be appreciated in the keenest sense possible, it may be said that three editions have come before the public in the short space of seven years. It is true that it has been frequently reprinted, but its revision has

only taken place once since the time of its birth. Of it the author says in his preface: "It is again out of print, and I have taken the occasion to rewrite a good deal of it, to add many practical hints, to answer some criticisms and to insert considerable matter in regard to the treatment of obesity, the use of milk as a diet and its effect on the excretions. I have also altered its second title so as more satisfactorily to describe its scope and purpose."

The treatment of this class of patients, that is, those who are nervously prostrated and hysterical, whose blood lacks its nutritive power, and whose tissues are flabby and unstable, is now not unknown to the profession since the publication of this author's brief sketch of "Rest in the Treatment of Nervous Diseases," in 1875. Indeed, since that time our journals have been filled with articles discussing, *pro et con*, the intrinsic merits of the same, while various gentlemen like Playfair, of London, Ross, of Manchester, Coghill and others have warmly endorsed it publicly before the British Medical Association. France, also, has justly considered this important subject, and the author's book, as translated by Jennings, with an introduction by Ball, is now to be found among the standard medical works in many of the book stores and private libraries of Paris.

With regard to the originality in the introduction of this system of treatment as advocated by the author I can only quote the following from Playfair's work on "Nerve Prostration and Hysteria," published last year: "Although Dr. Mitchell's treatment was not new in the sense that its separate recommendations were made for the first time, it was new in the sense that these recommendations were, for the first time, combined so as to form a complete scheme of treatment. I feel bound, however to say that, having carefully studied what has been written on the subject, I can nowhere find any thing in the least approaching to the regular, systematic and thorough attack on the disease here discussed."

The present volume, as presented by its author is divided into eight chapters, with an index. Chapter I., "Introductory;" Chapter II., Gain or Loss of Weight Clinically Considered;" Chapter III., "On the Selection of Cases for Treatment;" Chapter IV., "Seclusion;" Chapter V., "Rest;" Chapter VI., "Massage;" Chapter VII., "Electricity;" Chapter VIII., "Dietetics and Therapeutics;" "Index."

Certainly this last edition of Dr. Mitchell's work is to be highly commended, and, from personal experience, your reviewer can safely and agreeably urge upon the profession such a form of treatment as is here so admirably laid down for a class of cases, the possibility of curing which has heretofore been frequently abandoned in despair. F. T., JR.

NOMENCLATURE OF DISEASES. No. 65 of the general publications of the State Board of Health of New York is a classified tabulation of the principal diseases and injuries that may end fatally. The names are given in four columns, which present on each horizontal line an identical name in English, Latin, French and German. This necessitates the broad page and the imposing quarto form of the publication. While this nomenclature closely follows that of the Royal College of Physicians, which has long been adopted by the United States Marine Hospital Service, yet considerable changes have been made from its model, such as the separate tabulation of affections of the ductless and lymphatic glands and the use of new terms in nomenclature of tumors and of various diseases of viscera and tissues.

The preface says that "not every possible cause of death is enumerated." We observe the omission of "nervous shock," or "mental emotion," such, for instance, as when a person is frightened to death. A discussion on psychic causes of death, in the MEDICAL ANNALS, November, 1883, page 261, closes with the remark: "No recorder of vital statistics will refuse to accept such a reported cause of death." L. H.

THE ALBANY COLLEGE OF PHARMACY.—The following have been elected officers of the Alumni of the Albany College of Pharmacy for the ensuing year: President, Leonard H. Wheeler; first vice-president, Orrel T. Larkin; second vice-president, Geo. Boucher; secretary, Frank M. Clement; treasurer, Frank J. Smith; historian, Frank Richardson; executive committee, Frank B. Warren, Louis Sautter, Jr., Albert R. Griffith.

SARCO-PEPTONES.—Parke, Davis & Co. announce that they have assumed the introduction of this preparation of beef to the notice of the profession, and that it is a true food, in readily assimilable and palatable form. "Sarco-peptones" is a word adopted by the manufacturer of Rudisch's Extract of Peptonized Beef for convenience of physicians in designating that preparation. They will furnish, gratis, fuller printed matter and samples.

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HISTORICAL RETROSPECT OF THE CARE OF THE INSANE—THE ANNUAL ADDRESS OF THE PRESIDENT OF THE UNION MEDICAL ASSOCIATION.*

BY JNO. BEN. STONEHOUSE, M.D., A. M. C., '71, ALBANY.

The century which is fast passing away has made wonderful advances in many directions, but perhaps in none more than in the care and treatment of the insane. There has been an advance from barbarism in their care and negligence as to their treatment to the practical acceptance of the doctrine proclaimed by Horace Mann in the legislature of Massachusetts, that the pauper insane are the wards of the state — from mere houses of detention to comfortable hospitals — from ignorant and cruel keepers to the ministrations of humane and skillful physicians. And the United States has not been negligent in this good work; but, always accepting the principles of true humanity, wherever they have been found, she has attained an honorable, if not the leading rank among the nations of the globe. It will be my effort at this time to indicate briefly the evidences of this progress, with special reference to our nation and state.

Before the middle of the eighteenth century little had been done towards the care of the insane. We have an uncertain account of an asylum in Jerusalem in the fifth century. An Irish princess named Dymphne, so tradition tells us, was converted to Christianity about one thousand years ago, and, to avoid the

* Presented at a meeting held in Glens Falls, N. Y., February, 1884.

wrath of her father, fled to Gheel, in Belgium. The relentless parent pursued her, however, and, to show the superiority of his religious views, beheaded her with his own hand. She thus became Saint Dymphne and her shrine, for some unaccountable reason, became a refuge for the insane. To-day the Gheel colony for the insane is known to every student of insanity.

In 1442 an asylum was established by private means, in Holland. In the other countries of Europe the insane were committed to old monasteries at the expense of the church and state. They suffered at these places the ill consequences which followed as matters of course upon a plan of treatment inspired only by fear of these unfortunates, however kindly it was administered. Bethlem asylum (better known as Bedlam) was the first hospital instituted avowedly for the *humane* treatment of the insane. It was chartered December 27, 1547—the thirty-eighth year of the reign of Henry VIII. Immediately after the church and house of Grey Friars (granted for the purpose by the crown) had been formally opened, a series of rules was adopted for its management, and among these we copy the following, interesting as showing the earlier recognition of the necessity for classification according to causes, phenomena and duration of the disease: "(1) That all poor Lunaticks be admitted, except such as are afflicted with the palsy or subject to convulsive or Epileptic fits, or such as are infected with venereal disease, aud women with child; (2) that patients who have not been disordered more than one year before admission be admitted at all seasons and remain till cured, provided the same be effected within twelve months, and all such as have been longer than that time mad be admitted from Lady-day to Michaelmas only, when they are to be discharged, unless there be then a prospect of cure."

Let us glance for a moment at the methods of treatment adopted not only at Bethlem, but wherever any care was given to the insane in Great Britain, with one memorable exception — The Friends' Asylum at York. Dr. W. A. F. Browne ("What Asylums Were, Are and Ought to Be") says: "Let us pass a few minutes in an asylum as formerly regulated, and from the impressions made by so brief a visit let us judge of the effects which years or a lifetime spent amid such gloomy scenes were calculated to produce. The building is gloomy, placed in some low confined situation, without windows to the front, every chink barred and grated — a perfect gaol. Your conductor car-

ries a whip and a bunch of keys, and speaks in harsh monosyllables. The first common-room you examine—12x7, with a window which does not open—is perhaps for females. Ten of them, with no other covering than a rag round the waist, are chained to the wall, loathsome and hideous, but when addressed, evidently retaining some of the intelligence and much of the feeling which in other days ennobled their natures. In shame or sorrow one of them perhaps utters a cry; a blow which brings the blood from the temple, the tear from the eye—an additional chain, a gag and indecent or contemptuous expressions produce silence. And if you ask where these unfortunates sleep, you are led to a kennel eight feet square, with an unglazed air-hole eight inches in diameter. In this you are told five women sleep. The floor is covered, the walls bedaubed with filth and excrement; no bedding but well-decayed straw is allowed, and the stench is so unsupportable that you turn away and hasten from the scene."

Whipping seems to have been the favorite treatment. Reference is made to this fact by Shakspeare in "As You Like It," where he makes Rosalind say to Orlando (Act III., Scene 2), "Love is merely a madness, and I tell you deserves as well a dark house and a whip as madmen do; and the reason why they are not so punished and cured is that the lunacy is so ordinary that the whippers are in love too." We all remember the madman of Cordova whose tendency to persecute street dogs ceased after he had been well beaten for his cruelty. Dr. Cullen is said to have laid down as a principle of treatment the following: "In most cases it has appeared to be necessary to employ a very constant impression of fear, and therefore to inspire them with the awe and dread of some particular persons, especially of those who are constantly near them. This awe and dread is, therefore, by one means or another, to be acquired; in the first place by these being the authors of all the restraints that may be occasionally proper; but sometimes it may be necessary to acquire it even by blows and stripes." Von Helmont proposed and practiced the plan of keeping a patient under water until he was nearly drowned, in order "that his extravagant ideas might be destroyed, even to their primitive traces — an object which cannot be gained except by obliterating these ideas by a state bordering upon death." The criticism of Pinel is most just: "One must blush at this medical delirium, worse, perhaps, than that of the madman whose reason it was intended

to restore." Pinel himself, who is called the "father of the modern treatment of insanity," in his work on "Madness," has a chapter on "The Practice of Beating the Insane as a Means to Promote their Cure." In it he refers to the dogma of Celsus, that when the madman has done or said any thing outrageous he is to be coerced with hunger, chains and stripes; also to the story which Dr. Gregory gives of the Scotch farmer of great strength and stature who was famous for the cure of insanity, his specific being hard labor; his treatment of the complication of disobedience, a shower of blows. Dr. Willis permitted his attendants to return blow for blow in a manner "which gave to their brutality an independent and dangerous latitude." Dr. Willis, by the way, was the expert in whose charge George III. was placed during his fifth and last attack of insanity, and this statement in reference to his attendants may give some credence to the otherwise somewhat dubious story told by Lord Chancellor Eldon: "And yet, notwithstanding all this attendance and supervision, the king said that he was knocked down by a man in the employ of one of his physicians. When he got up again, he added, 'I said my foot had slipped, and ascribed my fall to that; for it would not do for me to admit that the king had been knocked down by any one.'" The following curious items are from the constable's account at Great Staughton, Huntingdonshire: "Paid in charges, taking up a distracted woman, watching her and whipping her next day, £0, 8s. 6d.; spent on nurse for searching the woman to see if she was with child, before she was whipped, 3 of them; 0, 2, 3." To whipping and drowning we must add the rotary chair, douche and plunge baths as instances of the scientific cruelty to the insane during this period. There is to be found a curious paragraph in the minutes of evidence against the management of Bethlem, Dr. Haslam, of that institution, being the witness: "The period of physicking continues from the middle of May, regulated by the season, to the latter end of September. Two bleedings according to discretion, half a dozen emetics, if there should be no impediment to their exhibition; and the remainder of the time until Michaelmas, a cathartic once a week."

In 1638, Fishponds Asylum, in England, was opened, Moorfields in 1675 and St. Luke's in 1751.

In 1752 the need of an institution for the treatment of all medical and surgical diseases was severely felt in the province of

Pennsylvania, and the foremost residents of Philadelphia joined in petitioning the House of Representatives of the province to aid them in erecting an institution, "which," as they said, "will be a good work, acceptable to God and to all the good people they represent." The petition calls attention to the fact that "with the number of people, the number of lunatics or persons distempered in mind and deprived of their rational faculties hath greatly increased in this province; that some of them going at large are a terror to their neighbors, who are daily apprehensive of the violence they may commit, and others are continually wasting their substance, to the great injury of themselves and families, ill-disposed persons wickedly taking advantage of their unhappy condition, and drawing them into unreasonable bargains; that few of them are so sensible of their condition as to submit voluntarily to the treatment their respective cases require, and therefore continue in the same deplorable state during their lives."

These efforts were successful, and on February 11, 1752, a hospital was formally opened for "the relief of the sick poor and the reception and care of the insane." Three out of the first four admissions were cases of insanity. The medical officers were among the most skillful physicians of the province. Dr. Rush, the author of the first American work on insanity, was one of the attending physicians, and delivered a course of lectures on insanity as early as 1805. To Pennsylvania, therefore, is due the credit not only of making the first provision for the insane poor, but also of actually receiving and treating the first insane patients. Virginia opened the doors of an institution for insane exclusively, at Williamsburg, in 1773. In the same year (1773) the Society of the New York Hospital, having received a charter from the crown in 1771, had commenced erecting a building for hospital purposes. This was accomplished through the exertions of Drs. Peter Middleton, John Jones and Samuel Bard, of New York city, aided in the collection of funds by Dr. John Fothergill and Sir William Duncan, of London. February 28, 1775, this building, only partially completed, was consumed by fire, and on account of the revolution, it was not rebuilt until January 3, 1791. No cases of insanity, however, were received until the month of May, 1797, when two cases of mania were admitted. In 1798 sixty-six patients were treated, and previous to December 31, 1803, there had been admitted 215 patients. The first assistance granted to this class of unfortu-

nates by the state of New York was to the Lunatick Asylum of the New York Hospital, and by its means a spacious and substantial stone edifice was erected and formally opened July 15, 1808, with sixty-seven patients. On the 17th of April, 1816, the legislature granted an annuity of ten thousand dollars until 1857. Thus encouraged, they purchased twenty-six acres of land on the Bloomingdale road. This edifice was completed and ready for occupancy in June, 1821, and was known as Bloomingdale Asylum. In 1796 the Society of Friends, with their characteristic principles of "peace, quiet and good-will to men," had inaugurated an Asylum at York, England, with the intention of managing by mild and gentle methods, rather than the harsh and coercive measures then universally adopted. Probably the example of the quiet patience and unflagging industry which marked their treatment and the evident success which crowned their efforts did more to bring about humane methods than all the sermons and sensational stories that have been thrust upon a gullible public by men ignorant of the truth and indifferent to to the result of their words, except in so far as reputations for philanthrophy might be expected to be gained. This good work did not end in the mother country, for, in 1817, an asylum was opened by the same society, in Frankfort, Penn.

Massachusetts gave some slight aid to individuals for the erection of an asylum. In 1818, by this means, the McLean Asylum was opened at Somerville. In 1822 the South Carolina State Asylum was completed. In 1824 the Hartford Retreat was opened, having received material aid from the State of Connecticut. These examples were followed in the same year by Kentucky and in 1828 by Virginia (the second asylum in that state). Thus far, however, state bounty had been given to these enterprises as an act of grace, but, in 1833, Massachusetts took the true position, that of obligation, and erected and furnished, at its sole expense, an asylum at Worcester. This view of the state's relation to its insane had long been the sentiment of the great majority of the thinking people, but this was its first official expression. And it gave a wonderful impetus to state action, for within nine years from the incorporation of the Worcester Asylum nine asylums had been erected and were in use, thus doubling the number and more than doubling the capacity of the institutions of the United States. At the end of this period (1843) this state opened an asylum at Utica; but,

the number of insane far exceeding the capacity of the institution, in 1852, Gov. Seymour recommended to the legislature the erection of another state asylum. No legislative action followed, however, and in 1856 a memorial was presented to the legislature, recommending the "erection of two state lunatic hospitals, so located that they may accommodate the largest number of insane at present unprovided for." A committee made an investigation into the condition of the insane not in asylums, and reported in favor of two additional institutions, to be located one east and one west of Utica. The bill presented by the committee failed to pass. In 1864 Dr. Willard, the Secretary of the State Medical Society, was directed to make further inquiry, and, in 1865, reported in conformity to his directions. Of this work and its result in the failure of a bill presented for two asylums, to be located, as in a previous bill, one east and one west of Utica, and the passage of the law incorporating the Beck Asylum for the Chronic Insane, afterwards changed by an amendment to the Willard Asylum for the Chronic Pauper Insane, we shall have more to say hereafter. In 1867, the erection of the buildings was commenced.

March 16, 1867, a bill was passed organizing a third state asylum, located at Poughkeepsie, and to be known as the Hudson River State Hospital. Work was commenced on the building in the following September. March 13, 1869, another bill was passed authorizing the Governor to appoint five commissioners to select a suitable site in the eighth judicial district on which to erect an asylum for the insane. After carefully examining the sites offered, they unanimously determined that "it would be for the interest of the state and the welfare of the insane and to the success of the institution to locate it in Buffalo, upon condition that the property shall be gratuitously conveyed and donated to the state of New York for the purposes of said asylum," etc. On the 23d of April, 1870, the act to establish the asylum in the city of Buffalo was passed.

In 1869 the Middletown Asylum was organized as a private institution, under homœopathic auspices, by Dr. George F. Foote. The sum of $75,000 was subscribed by its friends in various portions of the State. In 1870, however, there was introduced in the legislature a bill incorporating the institution and appropriating $150,000 towards its erection. This bill failed to pass, but a second bill, converting it into a state institution and appropriat-

ing $150,000, if a similar amount should be contributed by individuals, passed. As the necessary amount could not be collected by subscription, an amendment was made, in 1871, appropriating $20,000 for every $10,000 collected by subscription, provided that the total amount should not exceed $150,000. The Middletown Asylum was first opened in 1876, and now has capacity for 400 patients.

May 13, 1879, an act was passed to abolish the New York State Inebriate Asylum at Binghamton and to establish in its stead the Binghamton Asylum for the Chronic Insane. It was formally opened for patients October 20, 1882. Its capacity is 450.

At Auburn is located the Asylum for Insane Criminals, which is under the control of the Superintendent of State Prisons, thus differing from the other state insane asylums, which are managed by boards of trustees or managers, nominated by the Governor and confirmed by the senate. The original structure was commenced in 1857 and opened in 1859, with accommodation for eighty patients. It has been enlarged so that it now has a capacity for 160. It was originally known as the Asylum for Insane Convicts, and received, as its name implied, only insane convicts from the state prisons. In 1869 the designation became the State Asylum for Insane Criminals, admitting not only insane convicts, but those who have committed arson, murder, etc., and have been acquitted or not tried, on the plea of insanity.

The State Commissioner in Lunacy (an office created by act of the legislature in 1873) has a general supervision and advisory power over all asylums in the state, with legal power of investigation. Prof. Stephen Smith, M.D., of New York city, is the present incumbent of the office.

In 1844 the Association of Medical Superintendents of American Institutions for the Insane was originated, and has ever since exerted a powerful influence upon the care and treatment of the insane. After careful discussion, in which the wisdom and experience of a large number of alienists was expressed, a series of resolutions was passed, presenting recommendations as to the plans, organization, and management of asylums, and since then the great majority of asylums have been erected and governed in conformity to these general directions, varied, of course, in individual cases to meet special requirements.

For many years the annual meetings of this association were the only medium for the establishment and propagation of the principles of psychological medicine in America. Of late years, however, the surprising increase of interest in neurological science has led to the association of the students of nervous and mental diseases, in special societies, and the establishment of ably managed journals as their organs.

In our state exists the State Board of Charities, established by Chapter 951 of the Laws of 1867. Although, in consequence of the varied directions in which their energies have been exerted, it is impossible to do them full justice in a discussion necessarily so narrow in its range as is this; yet an instance, pertinent to our subject, will give some idea of their work. I refer to the collection of the statistics of the insane and idiots belonging in the state on December 31, 1871. Dr. Charles S. Hoyt, the secretary, upon whom this duty fell, prepared and transmitted a circular letter, with blanks for all the information required, to at least one physician in every town and to all the physicians in the cities and large villages whose names and residences could be obtained. In his report upon this investigation, transmitted to the legislature in 1873, Dr. Hoyt says: "The answers to these, in most cases, were promptly and carefully prepared, and the profession throughout the state, as well as the officers of institutions of this and other states, are entitled to great credit for the general interest shown by them in this matter." By this report it was shown that the whole number of insane belonging to the state was 6,775, being an excess of 422 over the number reported by the Federal Census of 1870. These figures include patients in the custody of friends, in public and private institutions, in city and county poor-houses and in the institutions of other states, as follows: In custody of friends, 1,582; in state institutions, 1,093; in private asylums, 312; in city alms-houses and asylums, 2,238; in county poor-houses and county asylums, 1,319; in institutions of other states, 161, and in the Asylum for Insane Criminals, 75. 2,907 were males and 3,868 females, the proportion to the population being 1 to 647. These statistics were elaborated in thirty-seven tables, and constitute, undoubtedly, the most complete census of these unfortunates ever made.

In the United States the literature of insanity, without being voluminous, is very valuable, and perhaps equal in all respects

to that of any other country. The profession in this state, it is pleasant to note, has contributed to this stock of information fully as much as the combined production of the remaining states. Previous to the declaration of independence the only work of note, in the English tongue, was that of Batty ("On Madness") published in 1757. Perfect, in 1778, and T. Arnold, in 1782, were shortly followed by the work of Dr. Rush, of Philadelphia, the most original and scientific view of mental maladies that had been published in English. Ray, Bell, Woodward, Butler nnd Kirkbride have all contributed largely, while New York State presents the work of such men as Dr. Brigham, the first superintendent of the Utica Asylum, Dr. T. Romeyn Beck, Dr. Gray, Geo. Cook, John B. Chapin, Kellogg, W. A. Hammond, A. McL. Hamilton, Spitzka, Mann, E. C. Seguin, C. F. and A. E. McDonald, Ordronaux, Shaw and others. The *American Journal of Insanity*, the first quarterly in the English language specially devoted to the discussion of insanity, was first published in 1844, by Dr. Brigham, of Utica (who was succeeded as editor by Dr. T. R. Beck, of Albany), and is now flourishing under the management of Dr. John P. Gray and his assistants. Several other journals have been started and discontinued after a more or less brief existence. At present, in addition to the *American Journal of Insanity*, already mentioned, there are the *Alienist and Neurologist*, published in St. Louis, and the *Journal of Nervous and Mental Diseases*, published in New York city. The "National Association for the Protection of the Insane and the Prevention of Insanity," recently organized, issues quarterly the *American Psychological Journal*. The articles appearing in its pages are, in most cases, devoted to the discussion of the management of asylums rather than any of the scientific questions relating to insanity as a disease; and it is noticeable that anything foreign (and especially English) meets its unqualified approval, while American asylums and American superintendents are, with a very select list of exceptions, always wrong. We have more than enough of Anglo-mania in fashion and manners without introducing it into professional matters. The Association enrolls in its list of members all who desire to further the purposes for which it was founded, without regard to sex or occupation. If it continues in its present line of action, it may possibly succeed in convincing the public that American asylums are all corruptly managed and entirely unworthy the least confi-

dence, but it will never succeed in correcting what is really faulty in asylum management nor in any way strengthening their managers in their efforts for humane and scientific treatment of the unfortunates committed to their care.

But, in considering the contributions to the literature of insanity, it would be unjust to omit any reference to the carefully prepared reports issued annually from the several asylums of the state, in which more valuable matter is to be found than should be expected from gentlemen whose attention is necessarily divided among so many and widely dissimilar interests as are presented to the consideration of asylum superintendents. Instead of finding fault with them for doing no more scientific work, the profession should insist that they be given a larger corps of better prepared assistants, so that it will be possible for them to present more satisfactory results. Instead of joining in the hue and cry raised by cranks and the self-styled humane whenever an irregularity is discovered in an asylum, we should aid in educating the public to the truth—that the trustees and managers of these institutions are carefully selected from among the most responsible and intelligent of our citizens; that the medical superintendents are, without exception, far above the average of physicians in character and scientific attainments, and that it is far from being discreditable to them that so few mistakes are to be found in the administration of their trusts. It is noteworthy that within the last five years the medical profession generally has shown an increased interest in the subject of insanity, as is shown by the marked increase in the number of articles relating to this subject published in the medical journals. This is a favorable sign; but let it be an improvement of the entire profession. Do not leave this study simply to the biased minds of those who are "in" and those who are "out." Hold superintendents to a strict accountability, but do not permit interested outsiders to develop, by distorted statements, an unjust public opinion that will interfere with honest effort.

Another significant indication of the growing importance of our subject is that chairs of psychological medicine have been, within a few years, established in all the leading medical schools. Some of these newly created professors are, as they should be, gentlemen of large experience in the care and treatment of the insane. In other cases the chair of mental disease is combined with that of nervous disease; and, while the occupant may be a

leading expert in the diagnosis and treatment of the latter class of diseases, his knowledge of the former is mainly obtained from text-books. This is unjust to the student and of no service to the growth of medical science.

Finally, let us briefly consider the present provision for the care of the insane in the state and the needs for the future, with special reference to the eastern portion of the state—that which we represent, in part. We now have the following state institutions for the insane: In the western section, the Buffalo Asylum, for acute cases, with a capacity for 350, and the Willard Asylum, for chronic cases, accommodating 1,800; in the central section, the Utica Asylum, for acute cases, accommodating 600 patients, and the Binghamton Asylum, for chronic cases, with a capacity for 450; in the eastern section, the Hudson River State Hospital, at Poughkeepsie, accommodating 350, and the Homœopathic Asylum at Middletown, with capacity of about 400, both of these being for acute cases. Moreover, the Middletown Asylum, being on the Erie Railroad, is much more accessible from the counties of the central section than from those portions of the state which we represent. In order to transport patients from the village where we are in session to-day to Middletown, several changes of cars are necessary, and the trip is thus made tedious, expensive and to some extent unsafe. Common sense, and experience as well, prove that when asylums are inaccessible and crowded the patients are retained in county poor-houses and at home, and are thus deprived of hospital treatment. However, this asylum *is* in the eastern section, geographically speaking; and we consequently have accommodation for 750 acute patients, without any provision for chronic cases, while in the remainder of the state the asylums for chronics accommodate 2,250. Furthermore, when we consider that the eastern section is much greater in area; that it contains one-half of the number of cities and over one-half of the population, and pays three-fifths of the aggregate taxation of the entire state, we cannot help thinking it unjust that the institutions which the state has provided within this section have only about one-fourth of the capacity of the asylums in the remainder of the state. But remember, in addition, that all the provision we have is for acute cases, and that the asylums for chronic cases (Willard and Binghamton) are full; and I think that there can be no doubt in the minds of thinking people that the time has come for us to demand of our

legislators something more in the way of accommodation of, at least, the chronic insane of the eastern section. I have thought this an opportune time for presenting this subject to your attention, inasmuch as the managers of the Hudson River State Hospital for the Insane have asked the legislature to appropriate a sufficient sum to cover the cost of erecting, on the farm connected with that institution, suitable buildings to accommodate 1,500 chronic cases. Thus these incurable cases may be cared for in an asylum much nearer to their former residences and where their friends can visit them with greater ease, and the counties supporting them will not be forced to pay annually excessive amounts for their transportation. An additional advantage, which will be readily evident to all, and which is borne out by the experience at Willard and elsewhere, is that with the larger number of patients under one management the per capita cost of support in the acute department of the institution would be very much reduced and a further saving to the counties be thus assured.

[Since the delivery of this address the bill providing for this appropriation has been killed in the legislature. The profession in this section should see that when it is presented, next year, neither local prejudice nor official favoritism is permitted to interfere with what is just and right.]

Since 1871 there has been an increase of over 6,000 patients in institutions of all kinds in the state, and there is no reason to suppose that the increase will cease in the future. This calls attention to the increased provision for their care which will be needed. This is a question which should receive our most earnest thought, and I had hoped to be able to discuss some of the principles which should, in my opinion, govern the state in arranging for such provision; but, on account of the length which this paper has already reached, I am forced to leave it and other questions of equally great importance to some future occasion. If I have succeeded in awakening a greater interest among you in the subject I have presented, my reward is an ample one. If not, my efforts have been a total failure, and the time occupied in the preparation and presentation of these remarks has been wasted.

HOW TO SECURE GOOD DENTAL ORGANS, PREVENT THEIR DECAY, ETC.

BY H. E. DENNETT, D.D.S., BOSTON.

In the discharge of their duties, the physician and dentist are daily asked, "What must I do to prevent my teeth from decaying?" The answer to this should be, "Correct your diet." That is, eat such food, and only such, as contains all its natural elements. If we eat all the products of grain, we must eat them with all their elements as furnished by nature. If we eat meat, we must also eat bones, or our systems will suffer from a violation of one of nature's unerring laws. It is conceded that dental decay is the dissolving away of the lime salts by vitiated secretions. This is not due so much to a want of cleanliness of the mouth as is commonly supposed, for it is not true that "a clean tooth never decays." One may devote twelve hours out of the twenty-four to the ablution of the mouth, and fail to prevent decay of the teeth, so long as nature's dietetic laws are violated. Acid will dissolve lime whenever the two meet. Acid saliva may be expected to follow an excessive use of acids, or of those elements capable of producing acid, or from a deficiency of the opposite elements. Dental development in man is discernible as early as the seventh week of intra-uterine life; hence the importance of a strictly correct diet from the first, if mothers desire to give birth to children who may have perfect teeth, and perfect health includes perfect teeth, for the teeth are little indicators that denote by their condition that of the whole system, just as a thermometer indicates thermal changes. A mother who passes through the period of gestation and lactation without a sufficient amount of bone and tooth element in her food will suffer from decay of the teeth, neuralgia, rheumatism and other diseases that result from an impoverished state of the system. The lime from her teeth will be dissolved, taken into the circulation and appropriated by the offspring. Excepting civilized man, all flesh-eating animals take as much of the bone with the flesh they eat as they can break with their teeth sufficiently fine to swallow, and all have good dental organs. Place before a tribe of Indians every thing the earth produces in the shape of food and they will eat only animal food, so long as it

lasts; but put them on a reservation and feed them as civilized people feed themselves, and decay of the teeth is sure to follow. Take from any carnivorous animals their supply of bone which they get with the meat, and dental decay is the inevitable result. Several years ago the lions in the Zoölogical Gardens of London were fed upon the thighs of horses. These being large, they were unable to break and eat them. As a consequence their young were born with cleft palates, and died shortly after birth. Subsequently they were fed upon deer and other small animals, and their young were born with perfectly formed palates and lived. Veterinary surgeons have long known that certain diseases of their dumb patients can only be successfully treated by feeding to them bone meal. A dam, too aristocratic to gnaw bones, gave birth to successive litters of rickety pups; but after eating food that contained a liberal percentage of bone meal, she produced perfectly healthy ones by the same sire.

Arguments in favor of eating bone to prevent decay of the teeth, as well as to cure a long catalogue of bone and kindred diseases, might be continued indefinitely; but, as "a word to the wise is sufficient," it seems only necessary to add that a long and continued experiment has been made upon a family, with results that fully justify all claims as to its beneficial effects. The bones used were selected from perfectly healthy animals, carefully cured without being allowed to pass through any perceptible chemical changes, finely granulated and incorporated into soups, gravies, bread, etc., in the proportion of from one to three spoonfuls of the meal to each pint of flour, gravy or soup. The relative proportion of nutritive elements in one hundred parts of different kinds of animal food have been found as follows: Beef, 26; mutton, 29; chicken, 27; pork, 24; brain, 20; blood, 21; codfish, 21; white of egg, 14; milk, 7; bone, 51.

ABSTRACTA.

Locomotor Ataxy not Tabes Dorsalis.—Pierret discovered that the "posterior sclerosis" necessary to locomotor ataxy was limited to the postero-external column or "root-zone" of Charcot. Many observers have shown that the awkward gait of "tabes dorsalis" may never make its appearance. Coetaneously with the propagation of these doctrines — by Buzzard, Gowers

and others — Pierret, and afterwards Déjérine, were upholding the doctrine that the symptoms of "tabes dorsalis" might be due to multiple peripheral neuritis. In a partially successful case of nerve-stretching for locomotor ataxy, by Langenbuch, the patient died at a second operation, apparently from chloroform. It was found that no change existed in the spinal cord. Disturbances of sensation and disorders of locomotion identical with symptoms of "tabes dorsalis" have been shown (*La France Medicale*, October 30, 1883) to have existed in two cases in which spinal cord, roots and ganglia were found healthy, but in which the peripheral nerves exhibited the changes ascribed to atraumatic parenchymatous neuritis.—*London Lancet.*

THE SPINAL CORD AND LOCOMOTOR ATAXY.—Heinrich Lissauer, Leipsig, says that a section from the lower dorsal region where Clarke's columns are well developed reveals in the posterior horn, in front of the substantia gelatinosa Rolandi, fine nerve fibres extending in all directions, but mostly vertical. Inside of this region is a well-defined field known as Clarke's cells. While the circumference is characterized by abundant fine fibres, there are in the column itself closely packed bundles of fine fibres extending upwards and numerous horizontal fine threads winding in every direction between groups and individual ganglion cells. Clarke's fibrous columns and the surrounding gray substance can be distinguished in a well-stained section by the naked eye as two columns inside the less-colored posterior horn; and coarse fibre tracks are seen passing from the posterior columns into the posterior horns to Clarke's columns.

In a sclerosed cord of a case of tabes, Clarke's columns are manifest by their poverty in fibre elements, as the normal preparation is characterized by their abundance. The ganglion cells lie intact in a region quite pale and free from fibrous nerve elements, while the surrounding gray substance and the rest of the section appear normal.

Lissauer stained with fuchsin, but Weigert stains with hæmatoxylin, and then washes in alkaline solution of red prussiate of potash; the fibres described are then black, the background yellow, the ganglion cells brownish, while the nuclei are uncolored.

Improved stains facilitate the testing of late statements that peripheral nerves, and not the spinal cord, are degenerated in so-called tabes dorsalis.— *Weekly Medical Review.*

THE MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

F. C. CURTIS, M.D., A. VAN DERVEER, M.D., LORENZO HALE, M.D.,
JNO. BEN. STONEHOUSE, M.D., WILLIS G. TUCKER, M.D.

VOL. V. MAY, 1884. No. 5.

SCIENTIFIC WORK IN INSANE ASYLUMS.

No class of medical men have contributed so little to the advancement of the general profession in scientific attainments as the physicians of the insane asylums of this country. They are, as a rule, and especially in this state, men of excellent professional standing. They have large numbers of patients continually under their observation, without the competition for business which interferes so much with practitioners of medicine in other departments. They have entire control over these patients as to treatment and general hygiene. Why, then, do we have so seldom contributions from their pens — the results of their investigations? Why do we not meet them oftener in our state and county medical societies? First, because the medical staffs of our institutions are too small. The physicians have little time for any other work than the reception, treatment and discharge of patients. If any such spare moments do occur, there are always plenty of other duties (not scientific) to occupy their attention. Secondly, until very lately there has existed among these physicians of asylums a sort of "trades-union" spirit. The symptomatology and treatment of insanity were secrets carefully guarded and transmitted only to the graduates of certain asylums. Whenever an essay was prepared, it was held until the annual session of the American Association of Superintendents, there read and then published in the journal of that association, thus reaching only a small portion of the profession and escaping all criticism. This "mutual admiration" association has not only kept useful information from the profession at large, but has injured its members by repressing any tendency

to the development of a liberal scientific spirit among them. It is a matter of great interest to all physicians that large and able staffs of medical men should be attached to every asylum, and that other physicians be given an opportunity to become acquainted with the results of their work. J. B. S.

——The West Riding Lunatic Asylum, at Wakefield, Yorkshire, publishes yearly a large volume containing articles upon scientific subjects connected more or less with insanity.

——In the last report of the State Asylum for Insane Criminals, a recommendation is made by its able superintendent, Dr. Carlos F. MacDonald, that a building be erected on a farm outside of the city of Auburn, and that the old buildings be converted into a State Hospital for Epileptics. Any one who has seen much of the wards of our asylums will recognize the propriety of the latter suggestion. The necessity for the removal of the institution over which Dr. MacDonald presides is equally evident, and should recommend itself to our legislators as humane and economical. J. B. S.

THE "LIGHTNING DENTIST" OF COHOES.

. . . "Vivat,
Novus doctor, qui tam bene parlat!
Mille, mille, annis, et manget et bibat,
Et seignet et tuat!"—*Moliere.*

A quack doctor, styling himself "Dr. Romain," came to Cohoes in April last. Dressed in gorgeous gilt raiment and attended by a band of music, he drove through the streets, drawing in his train the usual credulous crowd.

Taking up his stand at the squares, he removed teeth and wens gratis, and, he claimed, painlessly; in return he sold an immense number of bottles of his rheumatic remedy.

He seldom extracted teeth, in the great majority of cases simply breaking them off.

By his fluent tongue, and the rapidity of his operations, he gained sudden notoriety, and many unfortunate dupes. Many of his operations upon wens consisted in their simple puncture, and the expression of their contents. Three of these operations were to my knowledge followed by erysipelas. As his fingers were probably pus-covered from carious teeth, and as he told his patients that there was nothing more to be done, the results are not surprising.

The "doctor" kept an office in Troy, but disappeared upon the death of Mr. William Welsh of Cohoes, a man of fair health and remarkable endurance, seventy-five years old, upon whom he operated, Thursday, May 1, for the removal of an encysted tumor, which had existed for ten years over the right parietal bone. Erysipelas and extensive suppuration set in, and the patient died the next Wednesday, May 7th.

J. D. FEATHERSTONHAUGH, M.D.

ALBANY MEDICAL COLLEGE.

Further additions and improvements are to be made to the Medical College building during the present summer. The chemical laboratory is to be rebuilt and another story added, rendering it much more commodious and convenient. Work was begun on the 19th, and it is expected that the whole will be completed early in July. Various other improvements of a minor character are also to be made to the building. W. G. T.

BOOK NOTICES.

A Manual of Psychological Medicine and Allied Nervous Diseases. Containing the description, etiology, diagnosis, pathology and treatment of insanity, with especial reference to the clinical features of mental diseases and the allied neuroses, and its medico-legal aspects, with a carefully prepared digest of the lunacy laws in the various states relating to the care, custody and responsibility of the insane. Designed for the general practitioner of medicine. By Edward C. Mann, M.D., member of the New York Medico-Legal Society, etc., with photo-type plates and other illustrations. Philadelphia: P. Blakiston, Son & Co. 1883.

This is a work of seven hundred pages, handsomely printed and illustrated by four plates, the most valuable of which consists of five photographs of patients suffering from different forms of mental diseases. The first three hundred pages of the book are devoted to insanity. After some general remarks on the history and classification of insanity, its etiology and its repression in its early stages is considered. The rapid increase of insanity in this country during the past twenty years is shown by statistics, and intemperance as a cause is dwelt upon at length. No attempt is made to describe in detail the symptoms of the different forms of mental disease, but insanity is considered as a whole, which, in the opinion of the reviewer, is

a radical defect in the book. Under the head of diagnosis and prognosis many valuable suggestions as to the examination of patients are given. In the chapter on therapeutics the author introduces long quotations (each one extending over many pages) from the writings of prominent alienists in this country and in England, in regard to the treatment of the insane. This introduction of long quotations from different authors appears very extensively throughout the whole book, greatly enhancing its interest and value. The author also gives at length his own views upon the medicinal and moral treatment of the insane, and cites numerous illustrative cases; and, altogether, this chapter on treatment is the most interesting one in the work. Under the head of "Allied Nervous Diseases" the author treats at length of dipsomania, hysteria, epilepsy, chorea, vertigo, somnambulism, catalepsy, neuralgia and locomotor ataxia, and discusses the influence of our present forms of civilization upon the production of nervous diseases. The author devotes himself more especially to the etiology and therapeutics, and no detailed description is given of the symptoms of each disease. The book also contains a chapter on the regional diagnosis of diseases of the spinal cord and brain, in which a number of the recent discoveries in cerebral localization are given, and a chapter on electricity in diseases of the nervous system, in which the author highly recommends central galvanization in diseases of the brain. There are also a number of chapters and an appendix upon the legal aspects of insanity.

The lack of a scientific arrangement and discussion seriously detracts from the value of this work, which contains a great number of interesting facts and observations, and which is written in a pleasant style. It is plain and practical, and is well adapted to the wants of the class for which it is designed — the general practitioner; and certainly, at the present time and under existing laws, it is desirable that every general practitioner should have a fair acquaintance with psychological medicine.

H. H.

ELEMENTARY PRINCIPLES OF ELECTRO-THERAPEUTICS, FOR THE USE OF PHYSICIANS AND STUDENTS. With 135 illustrations. Prepared by C. M. Haynes, M.D., published by the McIntosh Galvanic and Faradic Battery Co., Chicago, Ill. Price, $2.00.

This volume of 420 pages is well worth a place in the library of every physician. The printers have done their work in a very

creditable manner, and the author writes clearly and succinctly. The directions for the use of electricity in medicine and surgery are as plain and practical as in any work previously published. The illustrations are so well done that they will prove to be aids to the physician in his practice. If any fault is to be found it is that the work is so evidently an advertisement of the McIntosh batteries. The work is otherwise so creditable that the publishers could have afforded to be generous and mention the manufactures of other companies. J. B. S.

SEXUAL NEURASTHENIA (Nervous Exhaustion). Its hygiene, causes, symptoms and treatment, with a chapter on Diet for the Nervous. By George M. Beard, A.M., M.D., (Posthumous Manuscript). Edited by A. D. Rockwell, A.M., M.D., New York. E. B. Treat, publisher, 1884. Price, $2.00.

An interest in subjects connected with the hygiene and pathological conditions of the sexual organs has been manifested by the large number of articles in the medical journals and the publications of Gross, Hammond and others, which have lately appeared. This work has been presented very opportunely, and although it does not add materially to an acquaintance with the subject, it is of interest as giving the experience and opinions of an observer so well trained as the late Dr. Beard. It is nevertheless evident, to those who have studied the author's previous contributions, that he would have never published this manuscript without revision if he had lived to study the subject in the light of subsequent publications. There is no doubt that there is valuable information in this book, and if any of our readers are interested in the subject of which it treats, they should not fail to purchase and read it. J. B. S.

THE PHYSICIAN'S COMBINED DAY-BOOK AND LEDGER. By H. T. Hanks, M.D., New York. Half bound Russian (Am.) back and corners, cloth sides, 150 double pages, space for 2,200 accounts, $4.50. The same, with 250 double pages, space for 3,700 accounts, $5.50. For sale by J. H. Vail & Co., dealers in medical books, 21 Astor Place and 142 Eighth street.

This account book for physicians is presented to the profession by the author, after a careful and systematic trial of the various methods hitherto in use, in the belief that the practitioner who keeps his own books will find this superior to any other system. The least possible expenditure of time in keeping the accounts legibly and correctly, and the use of as little space as is consistent with accuracy and specification, are the two

important factors of a physician's day-book or ledger. The author claims to have arranged in this book the most exact and labor-saving system of book-keeping ever devised for the use of a physician. The advantages are: (1) There is no waste of space. Each account passes directly across both pages. Each set of two pages is ruled by heavy horizontal blue lines to accommodate fifteen accounts, if desired. Small and transient accounts, therefore, do not cumber the books by taking up a whole page. The account can be continued from year to year without re-entering, until sixty-five charges are made, when a new space can be taken. (2) The account is easily followed by means of heavy blue rulings, which instantly direct the eye. The date and character of visit, member of family attended, if designated, and the several dates of debit and credit accounts are comprehended at a glance. (3) The entries are made with facility. Daily or weekly charges may be made, and, if necessary, minutely exact. This convenience will at once commend the book. (4) The book is day-book and ledger combined. Entries once made are final. No transfers nor extra posting is required. Possible mistakes are thus avoided; an extra book for ledger is not needed, and much valuable time is saved. (5) The book is equally well adapted to the needs of a city or country physician; to one with few or many patients. Each space between the perpendicular lines can be made to contain the amount of debit and credit accounts for a day, a week, or a month. (6) The sign for "bill sent in" [B] can never be mistaken for that for "account settled" [S]. Both signs are equally distinct, simple, unique and serviceable. The upper loop of each large "letter sign" is intended to contain the amount of credit and discount, while the lower loop contains the amount charged.

WHAT SHALL WE NAME IT? A dictionary of 2,000 names, with their meaning, etc. John C. Stockwell, 25 Ann street, New York. Price, 25 cents.

Unfortunately this list shows lack of care in its half-way alphabetical arrangement, and it would not require great philological lore to correct many of its errors; we note a few: "Jesse" is said to mean "the root of David." While it is true that Jesse was the progenitor of David, yet the word "Jesse" means "wealth." Sylvester, with a "y" from the Greek, is called a Latin work,and the Latin spelling, "Silvester," is omitted; its real

meaning is "of the woods," and not "son of a shepherd," as given by this author. "Stephanus" is here called "a gift" instead of "a crown." The popular view that "Eliza" and "Elizabeth" are identical is adopted here, and the proper spelling of Elisabeth (with an "s") is not mentioned. One of the most glaring defects is the signification given to "Wilhelmine," viz., "willing to be mine!" This is as bad as to claim that "apothecary" is derived from "a pot he carries" (where "pot" is to be understood as "mortar and pestle"). "Wilhelmine" should appear as the German feminine of Wilhelm, or William, and means, not "defending many," as the author has it, but "golden helmet," and may have reference to yellow hair.

The public will find more correct, and therefore more satisfactory, information in the larger English dictionaries and in the appendix of the "Sunday school editions" of the Bible. While this "dictionary" does not contain all the names that are in popular use, yet its good feature is that it does give a very large list.

L. H.

REPORT ON THE EPIDEMIC OF ENTERIC FEVER IN PORT JERVIS. From the fourth annual report of the State Board of Health of New York. By F. C. Curtis, M.D., Albany.

This report of twenty-three pages is issued with interesting tables and a map. One of the tables condenses in thirteen columns as many different items relating to each of ninety-one cases of fever investigated in this remarkable epidemic, shown to be due to infected milk.

The analyses of waters, by one of the public analysts of the State Board, Dr. Willis G. Tucker, are one evidence, of many others in the report, of the painstaking work required in a thorough search for facts.

The report is very readable, and is worthy of general distribution as a means of popularizing correct sanitary principles.

L. H.

MAGAZINE NOTICES.

Quarterly Epitome of American Medical Literature, collateral to Braithwaite's Retrospect. W. A. Townsend, publisher, New York, $2.50 a year. With the number for March, 1884, beginning its fifth volume, Wesley M. Carpenter, M. a

management. Dr. Carpenter is a man widely known as one whose talents and accomplishments make him specially fitted for this place. His labors will add to the reputation and to the value of the Quarterly.

Drugs and Medicines of North America. J. U. & C. G. Lloyd, 118 Elm street, Cincinnati, O. $1.00 a year. This Quarterly of 32 extra large octavo pages is not a pharmacal journal, but an encyclopædia of medical botany, issued in parts. It numbers among its contributors Prof. Roberts Bartholow, Philadelphia; Prof. E. M. Hale (Hom.), Chicago; Prof. J. M. Scudder (Eclec.), Cincinnatti; Prof. John King (Eclec.), Cincinnatti; Dr. Chas. Rice, New York; Prof. Bailey, Harvard; Charles Mohr, Mobile, and others. Mrs. Louisa Reed Stowell, Ann Arbor, contributes micro-drawings and microscopical descriptions. The illustrations of plants, sections, crystals, etc., are by J. A. Knapp. Vol. 1, No. 1, April, 1884, contains several minor botanical illustrations, besides four full-page engravings of American plants. This serial is of a high character, and is valuable for every botanist and for every physician.

The Chicago Medical Journal and Examiner. Published by the Chicago Medical Press Association, monthly, octavo, 112 pages. Established 1844. $4.00 per annum.

The Kansas Medical Journal, J. Milton Welch, M.D., La Cygne, Kansas. Vol. II., No. 4, April, 1884. $5.00 a year.

The Regular Physician, Vol. 1, No. 1. Monthly, $1.00 per annum. A. P. Hollett, M.D, editor, Havana, N. Y. Organ of Southern-Tier Homœopathic Association, State of New York.

Outing, Boston, $2.00 a year, 80 pages monthly, is the handsomest magazine in the world, wholly devoted to out-of-doors. Its rich illustrations and artistic printing, and the quality of its literature and its art, make it of interest to those who enjoy 'cycling, fishing, and all the round of health-giving recreation in a practical way; and also to those who enjoy out-door life from a literary point of view. Underneath its fun and sport, *Outing* never loses sight of its serious purpose of physical culture. Athletic culture is a necessity for the further advancement of civilization.

What and Why is a ten-cent Cycler's Catechism, giving definitive and mechanical, practical and legal information in an attractive way. Address, Col. A. A. Pope, Boston, Mass.

Home Science, Vol. I., No. 1, May, 1884, monthly, octavo, 112 pages, $2.50 a year. Published by S. R. Hopkins, New York, and S. W. Partridge & Co., London, Eng. Dio Lewis presents this very attractive magazine for popular favor. Besides his own readable productions, he has secured the coöperation of T. D. W. Talmage, D.D., Robert Collyer, D.D., E. P. Thwing, Ph.D., Byron D. Halstead, Sc.D., R. S. Storrs, D.D., Miss M. E. Winslow, M. Eugenia Berry, Warren E. Price, A. Rambler, D.D., Nathaniel T. Allen, D.D., Dennis Reed, Helen C. Lewis, Lillie Devereux Blake, Mrs. M. C. Rankin, Mrs. M. A. Potter, etc., in the domain, as might be inferred, of moral, mental and hygienic training and on social science in general.

Le Citoyen Americain The only English and French paper translated in alternate columns, in North America. Weekly, $3.00 a year. Minneapolis, Minn.

El Latino Americano," May, 1884. Año I, Núm I; Hecktograph Manufacturing Co., 22 y, 24 Church street, N. Y., E. U. de N. A. Precio de suscricion, $3.00 al año.

PAMPHLETS RECEIVED.

"The Opium Psycho-Neurosis, Chronic Meconism, or Papaverism," by C. H. Hughes, M.D., St. Louis. Reprint from the *Alienist and Neurologist.*

"Borderland Psychiatric Record—Prodromal Symptoms of Psychical Impairment." By C. H. Hughes, M.D. Reprint from the *Alienist and Neurologist.*

"Report of Proceedings of the Illinois State Board of Health," January, 1884.

"Fifth Biennial Report of the State Board of Health of Maryland," 275 pages.

"Arrest of Development Caused by Intra-uterine Pressure," by H. F. Hendrix, M.D. Reprint from St. Louis *Med. and Surg. Journal*, February, 1884.

"Announcement of the Baltimore Polyclinic and Post-Graduate Medical School," Baltimore, Maryland.

"New York State Medical Association; Minutes of its Organization, February 4 and 6, 1884."

"State Asylum for Insane Criminals, Auburn, N. Y." Twenty-fourth Annual Report.

"Hygienic Institutes. The utility of their work of investigation, and the need of it in this country." By Prof. Geo. A. Smyth, Burlington, Vt.

"Peroxide of Hydrogen in Suppurative Conjunctivitis and Mastoid Abscesses." A. E. Prince, M.D., Jacksonville, Ill. Reprint, St. Louis *Med. and Surg. Journal.*

"Palato-Plasty," by David Prince, M.D., Jacksonville, Ill. Edition printed for members of the International Medical Congress, London.

"Letter of John J. Davenport, Esq." The high sickness and death rates of New York due to lack of cheap and rapid transit. Published by the Arcade Railway.

"Aneurism of Femoral Artery" and "Knife Wound of Intestines," by W. O. Roberts, M.D., University of Louisville. Reprint from *Amer. Prac.*

"Notes on the Opium Habit," by Asa P. Meylert, M.D., New York. G. B. Putnam's Sons.

"Moral (Affective) Insanity—Psycho-Sensory Insanity," by C. H. Hughes, M.D., St. Louis. Reprint from the *Alienist and Neurologist.*

"Medical Science;" a poem by Edward B. Atkins, M.D., A.M. C. '74. Reprinted from the *Homœopathic Physician* by Burdick & Taylor, Printers and Publishers, Albany, N. Y.

"Yellow Fever Statistics," 1870–1883. National Board of Health, Washington, D. C.

The Travelers' Insurance Company have kindly presented us with a large colored engraving of Bartholdi's Statue of Liberty.

MEDICAL NEWS.

MEDICAL SOCIETY OF NORTHERN NEW YORK.

The spring meeting (thirty-second year) was held at Troy, May 7, 1884.

The meeting was called to order at eleven o'clock A. M., by Dr. W. W. French, of Ballston, the president, Dr. C. M. Mosher, of Easton, being absent.

There were present members from the counties of Albany, Dutchess, Rensselaer, Saratoga, Montgomery and Schenectady.

The following reports were presented, read and accepted for publication:

By Dr. George E. Gorham, of Albany, on "Baptisia Tinctoria in the Treatment of Typhoid Fever."

By Dr. H. S. Paine, a "Case of Ulcer of the Stomach;" also exhibited the specimen showing perforation.

Dr. E. A. Bartlett, a paper on "Electricity in the Diagnosis and treatment of Exophthalmic Goitre."

Dr. N. E. Paine, spoke of the influence of Massage in the treatment of debility, heart disease and apoplexy.

Dr. J. F. Niver, a "Case of Bright's Disease."

Dr. H. M. Paine, a report on "Drug Proving."

Dr. H. S. Paine, described a case of "Vesico-Vaginal Fistula;" also the operation for its closure.

Dr. A. C. Howland reported a "Case of Chronic Colonitis."

Dr. George E. Gorham spoke of the transmissibility of diphtheria and scarlet fever, and of their origin and development under widely different circumstances and conditions.

Dr. H. M. Paine, a paper on "The Utility of the Hot Water Douche for the Relief of Congestion and Inflammation of the Pelvic Organs;" also exhibited an apparatus by means of which hot water may be conveniently applied.

Dr. W. E. Rogers, a paper "Showing the Importance of Treating Constitutional Conditions rather than Local Symptoms."

Dr. H. S. Paine, described the several operations required for the closure of a large abscess resulting from pelvic cellulitis.

Dr. F. L. Vincent, a "Case of Acute Yellow Atrophy of the Liver."

Dr. W. W. French reported cases showing the contagiousness of phthisis.

Dr. H. L. Waldo advocated strict adherence to proper diet in the management of cases of typhoid fever.

The following were elected members of the society: Drs. J. H. Wheeler, of Pitsfield; B. D. Mosher, of Granville; I. W. Ferris, of Schenectady; F. S. Bloss, of Troy; A. R. Green, of Troy; W. F. Robinson of Albany; N. E. Paine, of Albany; W. B. Putnam of Hoosic Falls; W. E. Putnam, of Hoosac.

The summer meeting will be held at Saratoga, Wednesday, August 6, and the fall meeting at Albany, Wednesday, October 1.

H. M. PAINE, *Secretary.*

ALBANY COUNTY PHARMACEUTICAL ASSOCIATION.

The second annual meeting was held Friday evening, April 25. The reports of the secretary and treasurer for the year showed that while meetings had been held quite regularly and that the finances were in good condition, there being over one

hundred dollars in the treasury, the attendance was not what it should be, nor did our pharmacists generally evince much interest in the gathering. The address of the retiring president, Dr. C. H. Smith, was full of good ideas and sound advice. He spoke of the interesting meetings and subjects discussed by a few, and hoped that some means could be devised to draw a larger attendance. Matters of trade interest drew a larger number of members to this meeting than had attended in some time. The Campion plan of selling proprietary articles was approved of. This plan consists in the demanding by manufacturers of these articles a guarantee from the dealer that he will not retail below the marked price, nor sell to those who do.

The officers chosen for the ensuing year were M. W. Macomber, president; J. Zimmerman, vice-president; W. S. Elmendorf, secretary, and G. E. Ferguson, treasurer. A. B. H.

SUCCESS AT LAST—A PHARMACY LAW FOR NEW YORK.

The writer feels somewhat jubilant that the legislature has at last seen fit to vote favorably on the bill proposing a pharmacy law for this state. It was with this end in in view that six years ago he undertook the labors of forming a State Pharmaceutical Association; and at the first meeting held in Utica, in 1879, immediately after the formation of the organization, one of the first duties that devolved upon him as its presiding officer was to appoint a committee to draft the outlines of a state pharmacy law.

The labors and sorrows of that committee are distinctly remembered, and the arduous work of Dr. A. B. Huested, of Albany, before legislative committees and with legislative members cannot be too gratefully acknowledged. He has worked diligently and for the last two winters, with little aid and great discouragements; but faithful adherence on his part has been one of the great causes of success.

In the Senate the bill had many friends and but one opponent (Senator Vedder, of Cataraugus county). Senators Thatcher, of Albany, and Fasset, of Elmira, gave personal aid in securing its passage.

In the Assembly we are indebted to Dr. S. S. Cartwright, of Delaware county, Dr. G. M. Palmer, of Wyoming, Dr. H. Becker, of Albany, D. M. Van Cott and D. S. Kittle, of New York, for friendly assistance.

It needs now only the signature of the Governor; and, from his previous action and his known views on the subject, we are assured of his favorable consideration and official signature.—*New York Pharmaceutical Record.*

THE INTERNATIONAL MEDICAL CONGRESS is to meet in Copenhagen, Denmark, from August 8 to 16, 1884. Dr. Van Derveer will sail June 25th as a delegate from the State Society.

MAY PERSONALS.

[Brief items are wanted. Direct your postals to THE MEDICAL ANNALS, Albany, N. Y.]

Dr. N. L. Snow is elected president of the Board of Aldermen. His predecessor in office was Dr. William H. Murray, '69. The Common Council have changed their family physician.

Dr. L. Balch is appointed city physician in charge of the Alms House.

Mayor Banks has appointed the following district physicians for the six districts of Albany: Dr. F. D. Morrill, '81, Dr. T. P. Bailey, Dr. H. Lilienthal, '78, Dr. F. J. Merrington, '80, Dr. O. Ritzman, '79, Dr. S. E. Ullman, '80.

Dr. U. B. La Moure, '78, is appointed county physician in charge of the jail, for one year, by the Board of Supervisors.

Dr. W. H. Murray, '69, holds the position of physician to the Penitentiary.

Dr. N. E. Paine, '75, 105 State street, Albany, was elected member of the Medical Society of Northern New York, May 7.

Drs. H. Bendell, '62, and George S. Munson, '81, have each removed their ophthalmic and aural offices to No. 138 State street, formerly occupied by the late Dr. Frank. A. Munson, '75. Extensive repairs are in progress for the fitting up of the new joint offices.

Dr. C. J. Hasbrouck, '73, has removed from Valatie, N. Y., and will locate in Worcester, Mass.

Dr. E. C. Kennedy, '81, formerly resident physician in the Albany Hospital, is at 49 East 129th street, New York.

Dr. F. V. Brownell, '82, formerly resident physician in the Albany Hospital, is in Fort Plain, N. Y.

Dr. T. F. C. Van Allen, a graduate of the Albany Medical College, who has been engaged in ophthalmic practice in the

eye and ear infirmaries of New York since his return from Europe two years ago, has now permanently opened his office at 47 Eagle street, the same office first occupied as an "ophthalmic spot" by Dr. George T. Stevens, late of this city.—*Albany Argus*, May 4.

Dr. Walter W. Schofield, '82, formerly resident physician in the Albany Hospital, is in Dalton, Mass.

Dr. Lourie Ashton, '83, Hoosick Falls, N. Y.

Dr. Michael O'Farrell Dophin, from the College of Physicians and Surgeons, of Dublin, Ireland, has been surgeon in the Dominion line of steamships for the past year, and is now located in Hoosick Falls. Dr. Dolphin is a cousin of Dr. P. J. Keegan, of Albany.

Dr. J. C. Hannan, formerly of Albany, is also practicing in Hoosick Falls.

Dr. William S. Donnelly, '83, class historian, is in Saratoga, N. Y.

Dr. Charles Barney, '83, Glens Falls, N. Y.

Dr. W. W. Betts, '83, has removed from Chatham to Valatie, Columbia Co., N. Y., and succeeds to the practice of C. J. Hasbrouck, '73.

George A. Bradbury, '83, resident physician, Albany Hospital.

Dr. Martin J. Dwyer, '83, is senior resident physician in the Albany Hospital.

Charles A. Gillette, '83, is general agent of the *Syracuse Morning Standard.*

Dr. F. R. Hays, '83, is at 1132 Broadway, Albany.

Dr. George L. Johnson, '83, Brainard's Station, Rensselaer Co., N. Y.

Mrs. Ann DeWitt, relict of William H. DeWitt, Esq., whose life was characterized by acts of large benevolence, died on Friday, May 16, 1884, at her home in Albany. By her will, in addition to the endowment of the DeWitt Ward for Children in the Albany Hospital, and many other large gifts made in her lifetime, she bestows four thousand dollars to the Albany Hospital. This sum makes the amount of invested funds, now owned by the Albany Hospital, twenty-five thousand dollars. Eight years ago the Hospital was indebted beyond its assets to the amount of thirty-nine thousand dollars.

[CONTINUED IN JUNE NUMBER.]

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.

Annual meeting, second Tuesday in October. Semi-annual meeting, second Tuesday in May. Stated meetings are held Wednesday evenings, at Alumni Hall, Albany Medical College, at least once each month, from October to May.

OFFICERS.—Herman Bendell, president; J. L. Archambeault, vice-president; E. A. Bartlett, secretary; Theodore P. Bailey, treasurer.

CENSORS.—N. L. Snow, U. B. La Moure, William Hailes, Jr., W. J. Nellis, B. U. Steenberg, H. Bendell, *ex-officio*, J. L. Archambeault, *ex-officio*.

STANDING COMMITTEES.—OnPathology: William Hailes, Jr., chairman; A. Van Derveer, S. B. Ward, J. W. Moore, H. Hun, S. R. Morrow, G. S. Munson, D. H. Cook, F. L. Classen. On Hygiene and the Relations of the Profession to the Public: F. C. Curtis, chairman; Lorenzo Hale, D. V. O'Leary, Jno. Ben. Stonehouse, J. U. Haynes, A. B. Huested, J. Thompson. On Registration: T. K. Perry, chairman; H. March, T. Helme, E. A. Bartlett. On Publication (the Medical Annals): Drs. F. C. Curtis, A. Van Derveer, Lorenzo Hale, Jno. Ben. Stonehouse, W. G. Tucker.

EXECUTIVE COMMITTEE.—President H. Bendell, Vice-President J. L. Archambeault, Secretary E. A. Bartlett, Drs. F. C. Curtis, Lorenzo Hale.

Archambeault J. L. 56 Congress, Cohoes, 8-9, 1-3, 7-9
Bailey Theodore P. 75 Eagle, 9-10, 3-4, 7-8
Bailey William H. 1 Washington av. 8-9, 3-4, 8-9
Balch Lewis, 14 Washington av. 8½-9½, 2-3½, 7-8
Ball O. D. 766 Broadway, 8-9, 1-2, 6-7
Barker James F. 661 Broadway, 9-10, 2-3, 6-8
Bartlett, E. A. 83 Hawk, 8-9, 1-3, 5-7
Becker Hiram, New Salem, 8-9, 1-2, 7-9
Beckett Thomas, 276 Washington av. 7-9, 1-3, 6-10
Bell H. W. 350 B'way, E. Albany, 7½-8, ¼, 2-3, 7-8
Bendell Herman, office 138 State, 9-4; res. 109 Eagle
Bigelow J. M. 3 Lancaster, 8-9½, 2-3½, 7-8½
Blatner J. H. 132 Hudson av. 8-9, 2-3, 6-8
Boudrias L. 105 Mohawk, Cohoes, 8-10, 1-3, 7-9
Boulware J. R. 171 Hamilton, c. Eagle, 8-9, 2-3, 7-8
Boyd James P. 212 State, 8½-9½, 1½-3½, 7-8
Brown E. E. Bethlehem Centre
Brown R. J. 648 Central av.
Case Daniel C. Slingerlands, 8-9, 6-9
Case H. S. 80 Madison av. 8-10, 2-3, 6-8
Clark R. D. 65 Grand, 8-9, 12-2, 6 8
Classen F. L. 66 Grand, 9-10, 1-3, 6-8
Cook D. H. 264 Clinton av. 8-9, 1½-3, 6-8
Craig William H. 12 Ten Broeck, 8-9, 2½-3, 7-8
Crawford C. H. 154 Hudson av. 8-10, 2-4, 7-8
Crounse Hiram, Clarksville, 9 A. M. 4 P. M.
Crounse Jesse, Knowersville, 8-9, 7-9
Culver C. M. 91 Hawk, 9-12, 2-4
Curtis F. C. 17 Washington av. 8-9, 2¾-3¾, 7-8
Davidson J. R. South Bethlehem, 8-9, 1-2, 6 7
DeGraff A. Guilderland, 8-9, 1-2, 6-7
Devol C. 48 Franklin, 8-9, 12-2, 8-9
DuBois Mary, 192 Hamilton, 11 2, 7-8
Elmendorf G. E. Coeymans Hollow
Featherstonhaugh, J. D. 3 Summit, Cohoes, 2-3, 7-8
Fennely P. E. 97 Broadway, West Troy, 10-12, 4-5
Fisk Frank H. 76 Hudson av. 7-9, 1-3, 7-9
Fleischman D. 145 Hudson av. 8-10, 2-3½, 7-8
Fowler Amos, 29 Second, 8-9, 1-3, 7-9
Fowler W. H. 29 Second, 8-9, 1-3, 6-8; 387 State, 10-11, 3-4
Fredenburgh B. B. Coeymans
Freeman S. H. 77 Columbia, c. Chapel, 8-9, 1-2, 6-7
Geoghan William, 112 Philip, 8-9, 1-3, 6-8
Gould J. W. Cherry Hill, S. Pearl, 8-9, 2-3, 7-8
Graveline L. C. B. 119 Green, 8-9, 1-3, 7-9
Hailes William Jr. 197 Hamilton, before 9, 1-2, 6-7½
Hale Lorenzo, 194 Clinton av. 8-9, 2-3, 6-7
Hall John E. Green Island, till 9½, 1-3, 6-7
Hallenbeck, E. C. Bethlehem Centre
Haskell J. M. Second Bath, 8-9, 12-2, 7-9
Haynes J. U. 76 Remsen, Cohoes, 8-9, 12-2,
Hays William N. 626 Central av. 8-10, 1-3, 7-9
Healey James C. 46 Rensselaer, 8-9, 1-3, 6-8
Helme Thomas, McKownville, 8-10, 7-8
Huested Alfred B. 77 Eagle, c. Hudson av.
Hun Henry, 33 Elk, 8-9½, 2-3, 7-8
Hun Thomas, 33 Elk.
Keegan P. J. 139 North Pearl, 7-9, 12-2, 6-8
Kilbourne Albert W. 792 Broadway, 8-9, 2-3, 7-9
Knickerbocker G. S. 287 State, 8-9¼, 2-3, 7-8
La Moure U. B. 90 Hudson av. 8-9, 2-3, 7-9
Lewi Joseph, 94 Westerlo, 8-9, 2-3, 6-8
Lewi Maurice J. 54 Eagle, c. Lancaster, 8¼-9½, 1½-3, 6½-8½
Lyon George E. 494 Croton, West Troy, 8-10, 5-7
March Henry, 221 State, 9-10, 2-3, 6-8
McAllister John D. 85 Madison av. c. Rose, 8-9, 12 3, 6-8
McNaughton Henry G. 89 Hawk, 7-11, 6-7
Mereness H. E. 712 Broadway, 8-9, 1-3, 6-8
Merrill C. S. 23 Washington av. 12-4, 6-7
Merrington Frank J. 236 Clinton av., 9-10, 2-3, 7-8
Miller Howard, 260½ Madison av. 9-10, 2-3, 7-8
Mitchell J. H. Cohoes
Monroe Nelson, Swan, c. George, Gr'n Is'd, 7-9, 1-3, 7-8
Moore J. W. 92 & 94 Mohawk, Cohoes, 8-9, 1-3, 7-9
Morrow Samuel R. 59 Hawk, 8-9, 2-3, 6-8
Mosher C. D. 351 South Pearl, 2-4 P. M.
Mosher Frank G. Coeymans, 8-10, 7-8
Munson George S. 138 State, 9-4
Murphy P. M. 442 Broadway
Murray William H. 269 Lark, 8-9, 1-3, 6-7½
Myers John J. 920 Broadway
Nellis T. W. 44 Eagle, 8½-10, 1-3, 6-8
Nellis W. J. 44 Eagle, 8½-10, 1-3, 6-8

Newcomb G. H. 94 Chestnut, 7-9, 1-2, 6-8
O'Leary D, V. 69 South Ferry, 8-9, 1-3, 7-9
Paine H. S. 105 State, 8-9, 1-3, 7-8
Papen G. W. 89 Schuyler, 8-9, 1-4, 8-9
Peltier G. Upton, Cohoes, till 9, 12-2, 5-8
Perry T. Kirk, 174 Second, 8⅓-9⅓, 2-3, 6-8
Peters Samuel, 21 Seneca, Cohoes, 8-9, 1-2, 6-8
Porter Charles H. 55 Eagle, 8-9, 2-3, 7-8
Purple W. L. 46 Second, 9-10, 12-2, 6-8
Reynolds W. H. T. 31⅓ Hawk, 8-9, 1-3, 7-8
Riley Joseph W. 089 Broadway, 8-9, 2-3, 7-8
Ritzman Otto, 207 Lancaster, 8-9, 1-3, 6-8
Rouchel Laurentine, 101 Clinton av. 10-12, 2-4, 7-8
Sabin R. H. 245 Broadway, West Troy, 7-8⅓, 12-2, 6-7
Sabin William B. West Troy, 7-8⅓, 12-2, 6-7
Scattergood C. F. 10 Bleeker place.
Schutter Wm L. 28 N. Knox, 8-9, 2-3, 6-8
Seger C. E. Adams Station, 8-9, 1-2, 6-7
Shanks Seth G. 547 Clinton av. 8-10, 1-3, 7-8
Shiland A. 25e Broadway, West Troy, 8-9, 2-3, 7-8
Shiland J. C. 251 Broadway, West Troy, 8-9, 2-3, 7-8
Smith Charles H. 246 Washington av. 8-10, 1-3, 5-7
Snow N. L. 28 Eagle, c. State, 8-9, 2-3,7-8; res. 243 State, c. Swan
Starkweather R. H. 200 Central av. 8-9, 2-3, 7
Steenberg, B. U. 1 Chapel, c. Clinton av. 8-9, 1-3, 7-8
Steenberg, H. W. 24 George, Gr'n Is'd, 7-9, 1-3, 6-8
Stonehouse Jno. Ben. 5 High, 9-10, 1-3, 6-8
Swinburne John 57 Eagle, 1-10, 2-4
Ten Eyck A. P. Defreestville, Rens. Co. 7-9, 1-3, 6-8
Thompson John, 5 Canal, 8-9⅓, 1-2⅓, 6-8
Townsend Franklin Jr. 188 State, 9⅓-10⅓, 2⅓-3⅓, 8-9
Trego T. M. 7 Ten Broeck, 8-9⅓, 2-3, 7
Tucker Willis G. College Building, 2-6 P.M.
Ullman G. L. 70 Central av. 8-9, 2-3, 6-7
Ullman S. E. 195 Central av. 8-9, 1-3, 6-8
Van Allen T. F. C. 47 Eagle, 9-10, 1-4
Van Derveer Albert, 28 Eagle, 8-9, 2-3, 6-8
Van Slyke E. 320 South Pearl, 8-9, 2-3, 6⅓-8
Van Vranken A. T. 31 Union, West Troy, 8-10, 1-3, 6-8
Wade E. M. Watervliet Centre, 7-9, 3-5, 7-9
Ward S. B. 135 North Pearl, 8-10, 2-3, 6-7
Weidman Felix, Westerlo, 7-10, 6-9
Winne L. B. 72 Livingston av. 8⅓-10, 1⅓-3, 6⅓-8
Witbeck C. E. 20 Seneca Cohoes, 8-9, 1-3, 7-9
Woodward Harriet A. 6 Kenmore place, 8-9, 2-5, 6-7

The following have during the year gone by become non-resident members:

Buffinton C. E. Troy, N. Y.
Scofield W. W. Dalton, Mass.
Van Derpoel S. O. Jr. 38 E. 49th St. N. Y. city.

THE

MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

VOL. V. JUNE, 1884. No. 6.

MEDICAL STUDY IN EUROPE.*

BY CHARLES S. STARR, M.D., ROCHESTER, PRESIDENT.

Gentlemen of the Society:

Amongst the many questions daily occurring to medical men, it is somewhat difficult to know what one, in the brief time allotted to this paper, could be presented that would contain aught new to you. Truth, however, although always old, is like light viewed through a prism — apparently new; the latter depending for its variations in shade, clearness and color both on its relation to the prism and on the correctness of the eye both as an optical instrument and as the organ of perception. So to each of us as individuals every new presentation of an old subject, although the writer be but a dull prism, may, by arousing our attention, afford some new suggestion, either in accord or in opposition to the expressed views. Gathered as we are here, mainly, that each and all, from others' experience, may gain some practical point that may aid us in our warfare against disease and the approach of the grim destroyer, what can I present that will not be trite and dull to you? The proper relation of the physician to the public; the use and abuse of medical charity; hygiene and its kindred topics; the need of higher education; heredity in disease; legal medicine and expert testimony—

*Delivered at the annual meeting of the Medical Association of Central New York, at Rochester, May 20, 1884.

these, and many others, contain material enough for numerous papers — a number of them having been ably treated by former presidents of your honorable body.

During the past seven years many practitioners have enquired if indeed it were a good thing for medical men to investigate medicine in the hospitals of Europe; also, exactly what one can obtain abroad that cannot as well or better be obtained at home. I have thought, therefore, that a familiar talk about medical study in Europe, gleaned from my own experience during twenty months spent there, might not be entirely void of interest to you.

A physician is not merely a dispenser of nauseous drugs or a peddler of infallible specifics; but he is, in a great measure, successful just in so far as he can enter into the common thoughts and interests, as well as the sick-bed fancies of his patients. At the impressionable age at which one ordinarily begins his medical studies, therefore, it is far better to enter an American college and pursue his professional studies there, as thus he becomes stamped with American ideas and methods, and any advantages over our best schools that Europe may seem to offer would be dearly purchased by the loss of these national traits. The best time for one to gain most from foreign hospitals is after he has spent some years in general practice, struggling alone and unaided to solve the knotty questions of daily professional life, and has thus learned what most he needs and just where he is ignorant. Most men, however, after once entering practice, are retained by imperative duties at home, and but few can afford to lose a start so hardly obtained, and by absence be compelled on their return to begin anew. So the majority of those who go abroad are gentlemen but recently graduated; yet it cannot be too strongly urged, in every case, that a few months be spent in either clinical or hospital work in this country ere going abroad.

Permit me here to remark that the present tendency of sending young lads of tender age abroad, alone, merely for general culture, or travel, or the study of modern languages, cannot too strongly be deprecated. The customs and social life of continental nations are so different from our own, the entrance of a foreigner into society abroad is so difficult, while all that is vile, garnished and made to appear attractive is so freely opened and offered, that it is but little wonder that so many — it almost seems the majority — become ruined, or return with lasting bad habits.

The expense of spending a year abroad is not necessarily great. If one goes direct to Vienna and at the expiration of a year returns home, the following estimate will not be far out of the way: Cost of ocean trip and return, $150; hotel charges and railroad fare (third-class) — the Germans have a saying that only noblemen, fools and Americans travel first-class — perhaps in all $50; outlay for room and board, in the average style of university students abroad, in all, $365; and this estimate of $565 would be true of all needed expense, except for instruction, in any of the university towns of either Germany, France or England. Dr. W. C. Ayer narrates that his friend lived very comfortably in Heidelberg during three years for $25 dollars a month. Of course, beyond this sum one could spend any amount. The prices hereafter named as prevailing at Vienna for medical instruction will be true for such teaching in any German or French school, but in England it would cost about one-third more. If one wishes to lose no time and to study several branches, the best place to go is Vienna.

The schools throughout Europe open about the middle of September and close in July. This time is divided unevenly into two so-called half-year terms, the winter session being the longest, with one weeks vacation at the holidays and a longer one about March. The professors strictly keep these vacations, and at such times one had better recreate or travel than vainly seek profitable medical work. It is best to leave home in May, and, going to the Hanoverian district, to one of the four cities, Hanover, Celle, Brunswick or Berlin, devote three months entirely to the study of German. One can best do this by living in a German family, avoiding all who can speak a word of English, hearing, studying and speaking the language, and by the time the lectures begin he will usually find that he has so far acquired proficiency therein as to follow them readily and with profit. To one who desires more full and accurate information as to relative expense and methods in the different schools of Europe, and about the professors and the specialties taught in the individual hospitals of Germany, England and France, the little book lately published by Dr. Henry Hun, of Albany, would be of value.

At least three hundred American physicians every year are found spending more or less time in foreign hospitals. Very many of these are entirely ignorant of either French or German.

The story is told of an Englishman who started on the continent, knowing only two foreign words — those for yes and no. Reaching Paris in the morning, he enjoyed its beautiful boulevards and bright shop windows, until, becoming hungry, he espied a restaurant and sauntered in. Beckoning a waiter and pointing to the first entry on the bill of fare, he uttered the word "Oui," and was soon furnished with beef soup. Finishing this he again says, "Oui," and, indicating the second line, is provided with Saint Julien. Pointing again to the third entry, the waiter brings him vegetable soup. Desiring a decided change, he indicates the last item on the menu card, and to the cabalistic word, "Oui," at his plate is set down a liberal supply of toothpicks. Hastily rising he exclaims, "Only soup and toothpicks!" and returns at once to his native isle.

So, despite the endless number of sick people to be seen in foreign hospitals, those who go there ignorant of the language, relying for instruction on observation only, obtain simply the soup and toothpicks of medicine. For such, it is far better to remain in England or Scotland, and thereby intelligently digest what their eyes behold, than to enter continental hospitals, only to create a mental dyspepsia from unassimilated things seen and wrong impressions gleaned. To the question, Are the lecturers in Europe better than our own distinguished teachers? we would answer most emphatically, No. American instructors in medicine are noted for their ability to clearly express themselves. Not so well educated as their European compeers, they yet pick out the knowledge and facts there proven and published, and, in attractive, simple, often rhetorical phrase, they apply to it the American characteristic, and stamp its practical essence on the student's mind. Moreover, with our national enthusiasm and sanguine temperament, they infuse their pupils with zeal for work and with a strong belief in the power of the healing art, so that our graduates, when abroad, are recognized to be what at home they really are — eager, earnest and successful physicians. The German professors well illustrate the race. Patient, persevering, willing to spend a lifetime if only they can prove one new fact; slow to avow an opinion on any given subject until they have learned all that others have known thereon; and yet from this very exactness and thoroughness, skeptical about every thing that is not scientifically proven, no wonder that in anatomy, physiology, pathology and clinical records they stand acknowledged masters.

The French profession, with their nation, have, in a measure, fallen from their olden prestige. Bright, daring, vivacious, mad in theories, inclined always to take an opposite view to any German teaching, despite that their great university at Paris is thronged by seven thousand students, an American, except he wishes some specialty, would scarcely find it pay to study medicine there.

London appears in itself a world, and has schools sufficient, it would seem, for all mankind, in each of which is some one professor of world-wide fame. Could all the great teachers scattered through the various London hospitals be assembled in one central British university, the world has never seen such a collection of medical worth and learning as would there be gathered. Tinctured with the idea that in medicine, also, Great Britain contains all that is good; second only to the Germans in education preparatory to their position; almost as daring as the French, but less vaguely theoretical; free from the German tendency to skepticism; somewhat stiff in style, and, while exact, comprehensive and thorough, a little lacking in ability to sharply bring out the essential, yet approaching towards the full measure of American practicality, truly the English stand among the best teachers and physicians.

The preparatory course of students of medicine thirty years since was comparatively a simple one. Living at home and studying in some doctor's office, they devoted their time mainly to reading the authorities. Dissection, save on the bodies of criminals, being unlawful, they pursued anatomy in secret and at night, on material gleaned from some quiet country churchyard. Caring for their preceptor's horse, mixing the medicines for his saddle-bags, occasionally allowed by him to visit the sick-bed of some good-natured patient, and at last passing their examination before the censors of some county society, they were qualified to practice. Wise in book information, having seen but few patients either in medicine, surgery or midwifery, strongly tinctured with the prejudices of their individual preceptor, they went forth to kill or cure. Notwithstanding these inadequate early advantages, those who in our early days were the celebrated, trusted practitioners of the state had, by honest work and energy, reached a noble, broad fruition. Science and philanthrophy have changed all this. No longer reading books in an office, the student of to-day spends nine months

each for three years in some college. Anatomy *ad libitum* he obtains in the dissecting-room, pathology at the morgue, physiology and chemistry in the laboratory, materia medica and compounding drugs in the pharmacy. The practical branches of surgery, medicine, obstetrics and the specialties he obtains in the hospitals, following the bedside lectures of the professors there, reading in the faces and surroundings of the sick far more practical lessons than his father formerly from books. Truly a great advance on the olden way, and we exclaim, Now we have reached the best and highest method, and now graduate young doctors acquainted practically with disease and its manifestations.

But let us enquire a little more closely. All of these public hospitals are free from the direct control of the professors; they have no dictatorial voice there over the patients. In the desire to obtain students, these colleges employ political and often unseemly means to place their professors on the hospital staff, and, grouping about a common hospital, bring together so many students in these clinical lectures as to prevent much individual profit. These hospitals, also, with what are they filled? First, the pauper poor of foreign lands, who come here to this golden El Dorado expecting at once to become great and prosperous, and, failing to do this, are disappointed and suspicious. Second, the American born, who, unfortunate and now objects of charity, the more assume the so often false pride of an American citizen. As a rule our hospital patients are suspicious of everybody, act as if they conferred a favor on the charitable by accepting their charity, and are scarcely decently grateful to the learned professors who devote their skill and valuable time to help and heal them, while did a student or class of students seek to examine them they at once would repel such approach as an outrage. To nine hundred and ninety out of every one thousand students what do our boasted clinical lectures mean more than this, viz., sitting in the amphitheatre, from four to twenty feet distant from the patient, and seeing the teacher examine and prescribe or operate, observe how he examines or operates, and hear him explain why he does thus or so, or why he refrains? In other words, during our American student's life of three years in college, with its average work daily of six hours of didactic lectures and two hours of clinical instruction, how limited usually are his opportunities for gaining actual contact with the

sick, and thus, before he is thrown on his own responsibility, of truly and practically educating his touch, sight, hearing, skill and judgment in detecting and treating disease.

In Europe all this is far different. The state builds both the hospitals and the colleges; usually the universities are first and the hospitals but adjuncts. The professors are paid by the state, and have absolute control of the departments in the hospital, which correspond to the branches they teach, and from their dictum patients have no appeal.

To be a good teacher is a rapid way to reach fame and success. So these institutions are thronged by able, zealous men, licensed to teach, eager to obtain pupils, willing to work for moderate compensation, and always ready to instruct a select class in any particular branch. But most important, and causing the great difference, is the type and character of the patients in European hospitals. Reverence for authority reigns in these older lands, also esteem and respect for true learning; class feeling (the European form of caste) stamps itself everywhere. Hence the greater contentment with their lot in life while in health, because of less expectation of change, develops in them a different frame of mind when sick and subjects of charity. As a rule we find these patients not suspicious, but grateful, not falsely proud, but welcoming kindness; and, regarding the professor as their best friend, they do not arrogate to themselves knowledge, but yield gladly and implicitly to his directions. Here, then, we find the possibility of coming, as students, into direct contact with the sick, and this in small classes and under proper instruction. So, not only seeing the teacher do, but ourselves, under his direction, doing and examining, and thus educating all our faculties in the study and diagnosis, and, so far as possible, in the care and treatment of disease. This, then, it would appear, answers the question, What can be gained in European hospitals that we do not here obtain?

If this language is at all overdrawn, and if in the dispensaries and hospitals of America these same advantages can in some degree be obtained, still the broad difference spoken of exists, and these actual dealings with the sick and these modes of bedside instruction can, to a manifold greater extent and at much less expense, be acquired by the student abroad.

Perhaps a description, a little in detail, of the Vienna hospital and how students work there may more clearly define the pre-

vious remarks and not prove tiresome. The hospital at Vienna, which has just celebrated its centennial, is located three-quarters of a mile from the centre of a city containing a million and a quarter of inhabitants. It is a two-story stone building, with all its wings connected, built around thirteen courts, and enclosing an area of thirty acres. The building has capacity for twenty-eight hundred beds, averaging twenty-two hundred occupants, while some two thousand others, out-patients, are daily treated there. All manner of diseases are received, so that yearly in this great centre about ten thousand births occur and double that number of deaths. Accurate daily records of every case are kept, with its varying symptoms, the opinion of the professor and the treatment given, while in case of death there is always a post-mortem examination, and its record is placed with that taken during life, so justifying or controverting the treatment of the case. Thus is formed an invaluable fund of information from which to learn the history of disease and to build up more scientific future therapeutics. This, being the only medical school for the German-speaking portion of Austria, about eight millions in number, and located at the capital city, has no lack of students gathered there — usually three thousand. Here we meet gentlemen from all the provinces of Austria, speaking their peculiar dialects; also foreigners from every continent and nation, with their diverse speech, all scattered through the the various lecture-rooms and laboratories, each seeking that particular branch he desires. Probably the largest attendance at any one lecture-room is that assembled at Dr. Billroth's clinics, numbering about three hundred students. The teaching is divided as follows: There are forty-eight professors, paid by the government, each of whom delivers a didactic or clinical lecture daily. All of these have their own trained assistants, who live in the hospitals, care for the sick and execute the orders of the professor — corresponding to our house physician. The professors, also, are allowed to receive from each student attending their lectures five dollars for a six months' course. There are also a hundred and forty of the so-called private docents. These are gentlemen noted for excellence in some medical branch, who, awaiting hoped advancement to full professorial honors, are licensed to take pupils and give them instruction in any branch, at the same time being permitted to utilize for this purpose any of the sick in the hospital, subject only to the dis-

cretion of the professor in charge. These gentlemen receive their pay entirely from the pupils who employ them, and most of the instruction sought for by foreigners is in the small classes conducted by these private docents. Thus, from dawn to late twilight, or, in fact, from dawn to dawn, an eager student can study disease. Perhaps the routine of his day's work, as sketched by my friend, Dr. G., may give you a fair idea of what so many constantly do amidst this boundless field of disease:

VIENNA, September 29.

Dear Doctor:

Reaching this city four days since, and obtaining board, and becoming familiar with men and methods, have completed my arrangements, and the following will outline my daily work for six weeks: I have taken two general tickets for the ensuing term of six months. First, that entitling me to attendance on the daily clinical lectures of Prof. Billroth, and to visit at my pleasure his wards containing four hundred beds, thus witnessing any and all surgical operations conducted there. Second, that allowing me to listen to Prof. Carl Braun, a peculiarity of whom, and an advantage for a foreigner, is his slow utterance, so that if we fail to understand a word we can look it up in the dictionary ere the next one is spoken. By this ticket we can attend all his lectures, visit with him his wards, witness all operations, and also, by forming in classes of eight, each class in turn can attend on labor cases as they occur in his wards, some three thousand children being born yearly in his wards. Also from the one hundred and fifty American gentlemen studying here we have formed six classes, of ten each, to obtain instruction in the following branches from the hereafter named private docents. The duration of each class is six weeks, instruction in each one hour daily, except Sundays, and the expense of such special class is ten dollars for each member thereof. The following, therefore, will be my daily routine: From 8 to 9 A. M. Prof. Schroetter will instruct us in diseases of the throat and lungs, with use of the laryngoscope. From 9 to 10 Dr. Funk will furnish us work in the department of diseases of females in the wards of Prof. Spaeth or Braun. From 10 to 12 we attend on Prof. Billroth's operations or clinical lectures. From 12 to 1 we can obtain lunch; also, at this time, if we desire, we may visit in his ward any patient in whose case we have become interested. From 1 to 3 we spend hearing Carl Braun's clinical lecture's or witnessing his operations. From 3 to 4 we gather together in the class of Dr. Wœfler, which is thus conducted: Dr. Wœfler selects some surgical operation, and then performs it before the class on the dead body, and then each of the ten gentlemen in turn performs it; and these operations are so chosen that during the six weeks every individual of the class personally performs every one of the most common and important of them, and also sees the teacher and each of his nine companions perform them. At 4 o'clock we meet Prof. Caposi for an hour to hear him lecture on cases of skin and specific disease, each day averaging four patients in illustration of the particular topic of the day, all of which are first examined and commented on by the

teacher and then examined in turn by each of the class. From 5 to 6 Dr. Bandle conducts a class in obstetrical operations on the cadaver, which is managed in a similar way to that of Dr. Wœfler, so that in six weeks each member of the class sees Dr. Bandle operate first, and then, under his instruction, himself operates; and, during this course, every one of the class has thus rendered himself familiar with, and has performed on the dead body, each and every operation that is ever made in the lying-in room. From 6 to seven we devote to a good meal in the Kellar restaurant. From 7 to 8 we study diseases common to the eye, under instruction of Dr. Bergermeister, usually having at least half a dozen cases, in illustration of the evening's topic, present for our examination and treatment. And now our day's work is done, and usually we are tired enough for rest.

Subsequent to the six weeks described I shall omit some of these special classes and take in their place such other ones as I may desire; amongst them will be the following: Dr. Kundrat's course in pathological and post-mortem examinations, Dr. Monti's class in clinical diseases of children and Dr. Tolg's class in physical diagnosis. This daily routine will occasionally be varied by my turn coming to attend labor cases; also, now and then, by making a visit to the wards or lectures of some other distinguished professors here.

Thus, gentlemen, in a very imperfect word-painting, this paper has sought to give an outline of a few of the many attractions for the medical student abroad. Do you query, Why should one who has well fitted himself in this country for his profession do so much extra work, spend so much time and money? and ask, Does it, after all, really pay?

The Cathedral of Glasgow is the finest specimen of old Norman architecture remaining uninjured in the British Isles, and of late many donors have delighted to decorate it. Amongst its beautiful painted windows — the finest in Europe — perhaps the most beautiful of all is a small window down in the crypt. It represents a young man deeply intent on an unrolled scroll in his hands, and, entirely unmindful of the flower gardens and beautiful things all about him, his feet are turned to the stony, rugged path leading up through the crevices of the steep and jagged mountain, till it is lost in the ice and clouds. Across the scroll is written: *Sic iter ad astra.* This beautiful window is dedicated by some grateful Scottish countess to her deceased physician.

As that grand old cathedral, erected on a hilltop, its base deeply rooted in the soil, ages since rose slowly stone by stone, beautiful and imposing, until its gleaming pointed spire towered upward to the blue azure, and now, preserved from the destruction of zealous bigots by noble John Knox, still greets human

eyes as an inspiration and points us ever upwards: so we — like that pictured student, striving to pluck from their dim recesses every pearl of knowledge, caring for no fatigue, drawn aside by no enticement, content if by this arduous labor we can add one stone to that fair temple of knowledge so slowly building through the ages, whose object is to alleviate human woe — find as our reward not only that this path leads to the stars, but, though our life and its achievements lie only among the humble duties of the bedside, that the sense of work well done will help not only others, but lift our own spirit well up towards the ideal of human excellence.

DIPHTHERIA.*

BY J. W. MOORE, M.D., COHOES, N. Y.

The specific character of diphtheria, its contagiousness either as an epidemic or endemic, I will not discuss.

It is characterized by a peculiar lymph exudation manifesting itself on mucous surfaces, such as uvula, tonsils, palate, nares, larynx and trachea. This exudation is cacoplastic, which, with the epithelial cells, forms a thick, tenacious membrane, depositing itself sometimes with great rapidity upon the organs named. That the local manifestations are accompanied or preceded by various constitutional symptoms we all know, and I will not attempt to describe them.

In the *Medical Record* of recent date accounts of the treatment of diphtheria by five different authors of note are laid down. All agree so far as hygienic laws are concerned, but differ somewhat in the therapeutics of the disease. Four advocate the use of iron in various forms; one places no value in it whatever as a faucial remedy: one places considerable stress on iodine, while the rest do not mention it; quinine is advocated by three and disapproved by two; chlorate of potassa has friends in three out of five; topical remedies are recommended by three and not mentioned by two, and so on, showing the difference of opinion of these celebrated practitioners, each of whom has given extensive study and thought to this disease. For instance, Dr. Stillé recommends ice in mouth, muriatic acid by brush, with potassium chlorate, tr. iron, lactic acid, potass. permanganate; mentions

*Read before the Medical Society of the County of Albany, February 27, 1884.

emetics as sometimes advantageous in the early stages; alcohol and stimulants of quinine and iron, fluid beef and milk. He says tracheotomy is fatal in about three-fourths of the cases.

J. Solis Cohen maintains that the keeping up the supply of nourishment and stimulants and providing for the detachment and discharge of the morbid accumulations are the two main indications. Besides his hygienic directions, he regards the chlorine compounds as of more efficiency than all the other remedies; the principal of these is the tr. of the chlor. of iron, in thirty-drop doses, every half or every second hour, given with glycerine or syr. lemon; also hydrochlorate of quinine, strong wine or brandy in decided doses, and, at moments of sinking, carbonate of ammonium; ice in mouth at intervals; ice compresses not approved; morbid products in pharynx and nasal passages should be promptly removed; never cauterize the uninvaded tissue. Applications of the tr. of iron to the pseudo-membranes; forcible removal of the deposit not judicious; upon invasion of the larynx, or if respiration becomes obstructed, slaked lime inhalation, and emetics to provoke expectoration in children, but not necessary in adults; in threatened asphyxia, tracheotomy to avert death.

Bartholow believes in two indications — first, to shorten the duration of the disease; second, to obviate the tendency to death. He disapproves of caustics and acid applications, as inviting the disease to the adjacent portions of the mucous membrane by destroying the epithelium; he approves of the application of sulphur, in form of powder, by insufflation, and vapor of lime; a weak solution of lactic acid applied to throat by a large mop; no value in potassium chlorate nor tr. of iron as a faucial remedy; in gangrene sloughing, a one per cent. solution of carbolic acid applied to either throat or nares. Under the second head, with the earliest appearance of an exudation, he gives from two to ten grains of the bromide of ammonium every three hours, in the belief that its diffusion tends to detach the exudation. To prevent septic decomposition, he advises a drop or two of Lugol's solution of iodine in water every hour or two, when the exudation is fully developed, with alcohol steadily, also quinine. Fearing the injurious action of potassium chlorate upon the kidneys, he does not believe in its power as a curative agent. As food, milk, eggnog and beef tea given freely every three hours.

Abraham Jacobi believes alcohol a very important remedy in large doses — from two to twelve ounces daily; also chlorate of potassium, not exceeding a scruple daily; inhalations of vapor, particularly in fibrinous tracheo-bronchitis; drinking large quantities of water, with a view to macerating the membrane. He believes that the internal and external use of ice and the use of lime water and lactic acid have been greatly overestimated. Glycerine is an adjuvant — nothing more; chloride of iron is valuable, as also carbolic acid, one per cent. solution, in local and internal administration.

Dr. C. E. Billington recommends an iron mixture, with glycerine and water; also a mixture of potassium chlorate, alternating with glycerine and lime water; he uses a spray of carbolic acid and lime water, never applying a brush or swab to the throat; does not give quinine nor any other unpleasant medicine to children, nor alcholic stimulants, unless when a child will not take other nourishment except eggnog; he depends for nourishment on cold milk with a little lime water added.

Assuming the asthenic character of the disease, with the remarkable tendency to produce anæmia, some form of iron seems to be indicated. The main object is to induce the solution of the membrane or to prevent its re-formation when once removed. I do not believe in gargles but sprays and topical applications are of great service. Among the antiseptics, Mackenzie lays great stress on potassium chlorate, giving as high as ten to twenty grains every two or three hours, and does not mention the nephritic danger of the drug. This is somewhat singular, since its danger is so well known to the physician. Salicylic acid is by some highly recommended, but, as it is converted into salicylate in the system, it ceases to be antiseptic, Undoubtedly the best antiseptic is carbolic acid.

My plan of treatment for the last six months I will give very briefly. It has been almost uniformly successful, the rate of mortality being two to thirty, these two dying from fibrinous tracheo-bronchitis. After attending to the hygienic necessities as far as possible, such as putting the patient in a well-ventilated room, the air of which is both warm and moist, with the temperature between 60° and 65° (assuming that we are able to put our patient in a comfortable room, as often we have to treat them as we find them); and, thin patches of false membrane presenting themselves, with the other concomitant symptoms, I gently

spray the throat with a weak solution of chlorine gas, made by the action of tr. chlor. iron on potassium chlorate, slowly adding water as the chlorine is given off. I then give, according to age, from ten to fifteen drops of the tr. of iron every three hours in a little glycerine and water; good nourishing diet, such as milk, eggs, etc. On the second day, if the disease is not checked, I give one drop of Lugol's solution of iodine and a half drop of carbolic acid, in a little water and glycerine, every two hours, and increase the intervals of the iron to four or five hours. I also use a direct application, discarding the spray, of a mixture of iodine, glycerine and carbolic acid.

DISCUSSION.

Dr. N. L. SNOW: The various treatments of diphtheria seem to indicate that there are no very certain remedies for the disease. When called to see a case, I am very uncertain what remedies to employ for the best results. We see cases of pharyngitis, ulcerated sore throat (miscalled diphtheria), which give way to treatment and get well; but cases of the true disease, with membrane on the tonsils and extending to the epiglottis, die in a very few days. Nothing seems to help them, medicines are powerless and tracheotomy is useless, for the membrane forms below the opening. I have never operated in a case of this character where the operation saved the life of the patient. The tracheotomy operation has been successful in my hands, but the cases were most probably laryngitis.

Dr. A. T. VAN VRANKEN: Sewer gas is a factor in the causation of the disease. In one family a child was taken with croupous diphtheria, and died; a second was taken likewise, and died; a third sickened, tracheotomy was performed, but the child died from heart failure in ten hours. Investigation showed the drain to be defective. In another family three deaths occurred, and here, too, a defective drain was found.

The question was asked whether by a too strong use of the atomizer it is possible to drive some particles of membrane into the trachea.

Dr. D. H. COOK: Sixty-five cases of diphtheria have been reported this winter in the city, and nearly one half that number occurred on Arbor Hill. In answer to the question by Dr. Van Vranken, I should be afraid to use the atomizer unless there was laryngitis, not so much from fear of driving particles into the trachea as from fear of producing an irritation such as would furnish a new place for diphtheritic deposit. Some cases treated with mur. tr. iron, with quinine liberally and Bromo-Chloralum used with a swab for younger children and as a gargle by older, also sulphur freely, have terminated favorably. In these cases paralysis of the pharyngeal muscles, regurgitation of fluids, etc., showed them to be cases of true diphtheria. When you can see a case of pharyngeal diphtheria early and can saturate the patient with mur. tr. iron and quinine, you may expect it to get well. The topical use of the persulph. of iron is worse than useless; it denudes the patch, which is at once renewed, and in consequence of the

irritation produced the disease is extended. Mild applications allowing the patches to remain are the most satisfactory.

Dr. SNOW said: If we are called to see a case of peritonitis, we think at at once of opium; chills and fever, of quinine; hepatic congestion, of calomel; iritis, of atropine. Not so with diphtheria; there is nothing to which we can turn as a sort of sheet-anchor. There are many remedies proposed, but there seems to be but very little choice among them; they are all alike — uncertain.

ABSTRACTA.

A NEW REMEDY.—The *Albany Journal*, May 13, notes a report in the *New York Sun* of the cure of a case of diphtheria by inhalation of dense resinous fumes from burning equal parts of tar and turpentine, as recommended by Dr. Delthil, of Paris, and prints interviews with several Albany physicians in regard to it, concluding with the following:

OPINION OF AN EMINENT PRACTITIONER.

One of the most eminent physicians in Albany, whose modesty induced him to insist upon the suppression of his name, gave the following opinion of the matter:

There is no doubt that both tar and turpentine have antiseptic qualities, and the method of inhalation is one of the best for applying them to the mucous membrane of the throat. But the statement that the use of these drugs, or any others, will result in the cure of every case of diphtheria, no matter how malignant, would need to be backed up with a long array of statistics, from a number of honest and careful observers, to carry conviction to the mind of the conservative practitioner who has had much experience with this dread disease in its malignant form. Different epidemics of diphtheria give very diverse statements of mortality under any of the usual methods of treatment. If a young practitioner or an enthusiast happens to succeed with a number of cases during a mild epidemic, with the use of a new drug, he is apt to pin his faith to that remedy exclusively, and perhaps boast of its efficacy. But with every remedy that has yet been thoroughly tested it is only necessary to wait for its trial in a series of malignant cases to show that the vaunted specific is no better and no worse than many others that have preceded it. We sincerely hope that this new treatment will suffice to save every case, and will be heartily glad to believe it just as soon as it is proven.

TURPENTINE, one teaspoonful to children and one tablespoonful to adults, given in warm milk morning and evening, is said to have cured diphtheria in Germany in twenty-four hours.—*N. Y. Med. Times.*

CORROSIVE SUBLIMATE IN THE TREATMENT OF DIPHTHERIA.—Dr. H. T. Hanks (*N. Y. Med. Record*) has obtained better results in diphtheria from corrosive chloride of mercury than from any other remedy. He has employed it in doses of 1-160

of a grain in one drachm of water, giving it every hour, night and day. In his last two cases he applied the medicine with a common hand atomizer, and was agreeably surprised at the rapidity with which the exudation disappeared under this treatment. His formula for inhalation is the following: ℞.—Hydrarg. chlorid. corrosiv., gr. ij.; glycerine, ʒ i; aqua rosæ, ʒ vij. M. Sig.: To be used with atomizer for three to five minutes every half hour.

Liquor Ferri Subsulphatis in Diphtheria.—While struggling in vain, now about twenty years ago, against the great fatality of this disease, as much a stranger to our observation at that time as the plague, I accidentally learned that Dr. Medina Preston, of Sangerfield, Oneida county, N. Y., where the complaint was also then epidemic, was having very great success in treating it by the local application of Monsel's salt. This medicament was as much unknown to me by that name or for any such use as the disease itself. I procured some of it, and, instructed by Dr. Preston in the method of its use, put it on trial. Since that time I have used nothing else as a local application, and have come to consider it not only as almost sovereign, but, in fact, the only thing that I know of that has any certain efficacy, topical or constitutional, in the treatment of that complaint. Diluted with water to one-half strength, it is to be well painted twice a day over the diphtheritic patch and the surrounding mucous membrane with a camel's-hair brush, or fine, soft swab. You must get a full, quiet and continued exposure of the parts, so as to do a good job; to do which the patient, if a child, must be firmly held. To daub the medicine somewhere into the back part of the mouth or down the gullet will by no means answer. This salt is in no way a caustic, nor disinfectant, nor even, so far as I know, a poison to bacilli or any other such bugbears. But it is a mighty astringent, and seems to operate in the silly way of puckering the life out of the diphtheritic deposit and sucking or squeezing the bad juices out of the living parts adjacent. Not but that the patch or patches of false membrane are apt, notwithstanding, to reappear even again and again, and not seldom with enlarged area, but always with less density and diminished rankness of look. Unfortunately, there seems to be no safe way of effectually applying this remedy within the larynx, so that it is of no use when the disease has invaded that part. Neither dare I claim it to be a specific,

but only that it is a very good thing.—*Dr. C. C. P. Clark, Oswego, N. Y., in N. Y. Med. Jour.*

CYANIDE OF MERCURY in diphtheria is again in use, 1-60 to 1-80 gr. hourly, or oftener, day and night, preferably in solution; to young children, smaller doses.

TRIPLETS occurred recently in the practice of Dr. T. K. Perry, of Albany. The mother, 36 years old, had four previous children born singly; she was confined to her bed about two months before this last delivery, and suffered from extreme abdominal distension and from hemorrhages from the gums, nose and rectum, although the hemorrhagic diathesis was not a family trait, and the patient had never before suffered abnormal loss of blood. The triplets, two girls and a boy, perfectly formed, were born apparently at full term after a normal labor of about three hours. The presentations of the first (the boy) and last born were cephalic; of the second born, podalic. There were three amniotic sacs, rupturing separately, containing an excessive amount of fluid; the three cords were each rather short and much attenuated; the single placental mass was divided by intervening tissue into three distinct lobes. The triplets, not weighed, were of about four pounds weight each; they never nursed, although the mother had good breasts of milk. The boy died after three days, one girl at five days and one at nine days. The mother had a tedious convalescence of two months.

DANDRUFF.—℞. Aquæ, ℥ xij; Listerine, ℥ iv. M. The best preparation for dandruff and to promote the growth of hair.—*Medical Brief.*

SARCO-PEPTONES.—Albuminoids should be furnished to the stomach as peptones, which are substances differing from albumin and fibrin in being freely soluble in either cold or hot water and in being capable of dialysis. Attempts have long been made, with indifferent success, to produce a peptonized preparation of beef, at once concentrated, palatable and permanent. This desideratum seems to be at last fully met in the "sarco-peptones" of Dr. Rudisch. Judging from the amount of mineral matter present, one pound of sarco-peptones represents about six pounds of beef, while one pound of Liebig's extract of beef represents sixteen pounds. It must be remembered, however, that the proteids of meat cannot be concentrated, except as they are dried; therefore, it is impossible for a preparation which

contains them to be "concentrated" to the same extent as ordinary beef *extracts* which simply omit them. "Extract of beef," so-called, contains scarcely any tissue-forming material, and owes its value to its stimulating properties. Sarco-peptones are sufficiently rich in the same stimulating salts, but they also contain the *plastic* material required for repair *in a condition for immediate absorption.—Therapeutic Gazette.*

Beef Peptonoids.—Dr. Stutzer, director of the Imperial Agricultural Chemical Laboratory for Rheinish Prussia, Bonn, Germany, says: "I have carefully analyzed Beef Peptonoids with the following results (dry analysis), viz.: Albuminoids (nitrogenous substances), 70.29; fat, 11.45; dextrine (milk sugar), 10.75; starch, 1.35; cellulose, .26; salts, 5.90—100. On examination the albuminoids showed as follows, viz.: 97 per cent. consisted of albumin and peptone easy of digestion; 1 per cent. creatine; 2 per cent. substances difficult of digestion; proving the nitrogenous substances in the preparation to be readily assimilated. The exceptionally high nutritive value of this preparation is due to the great quantity of digestible albuminoids present. If compared with other foods in the market, the result would be as follows: Beef Peptonoids, nitrogenous nutritive matter, 70.29 per cent.; caviar, 26 per cent.; beef, 20 per cent.; fowl, 18 per cent.; mutton, 18 per cent.; eggs, 13 per cent.; bread, 8 per cent.; milk. 4 per cent.; Liebig's extract meat, 5 per cent.; potatoes, 1 per cent. The flavor and odor of the preparation are exceedingly pleasant, and surpass any preparation of meat with which I am acquainted. The results of my analyses are such as to enable me to pronounce Beef Peptonoids to be a *most valuable* and *easily digested* nitrogenous food for invalids and convalescents. I extend to it my fullest endorsement."

Renal Calculus.—Dr. T. M. Jordan, Hookertown, N. C. (*Med. and Surg. Rep.*) A case of recurring nephritic colic was relieved, after other remedies failed, by drachm doses of Lithiated Hydrangea (Lambert & Co.) four times a day. Only two attacks occurred after beginning this treatment, and with the second attack a skeleton stone, *i. e.*, a mere shell, was passed.

Lithiated Hydrangea (Dr. W. H. Macon, Old Church, Va.) relieved frequent micturition in a case of diabetes mellitus which had lasted twenty years. In a case of chronic Bright's disease (Dr. J. G. Hughes, Rainsburg, Pa.) it modified distressing symptoms.—*Louisville Med. News.*

MEDICAL NEWS.

MEDICAL ASSOCIATION OF CENTRAL NEW YORK.

The seventh annual meetiag was called to order in the Common Council chamber, City Hall, Rochester, N. Y., Tuesday, May 20, at 10:30 o'clock, by the president, Dr. Charles S. Starr, of Rochester.

The president appointed the following committees: On Credentials: Drs. Darwin Colvin, of Wayne county; Eugene C. Barnum, of Orleans county; J. N. Allen, of Ontario county. Business: Drs. M. L. Mallory, of Monroe county; Lucius Stevens, of Onondaga county; L. J. Ames, of Livingston county. Reception: Drs. J. P. Creveling, of Cayuga county; A. Mandeville, of Monroe county; E. H. Draper, of Wayne county.

The treasurer, Dr. Alfred Mercer, of Syracuse, made his annual report, showing a balance on hand of about ninety dollars.

Dr. Charles Buckley, of Rochester, reported cases of mercurial poisoning caused by the red rubber teeth-plate.

Dr. Dann had seen symptoms similar to one of Dr. Buckley's cases, caused by a gold plate which pressed too closely upon the soft palate.

Dr. W. S. Ely had in several cases advised the discontinuance of the plate for half a day at a time.

Dr. E. H. Howard had in his own case substituted the dark rubber, which contains no mercury, and had experienced no difficulty since.

Dr. J. O. Roe referred to the amalgam filling as equally injurious.

Dr. W. S. Ely reported a case diagnosed as typhoid fever, but Dr. E. doubted the diagnosis. The brain and other organs which he exhibited at the meeting showed a congested condition, with many hemorrhagic spots and occasionally nodules, especially on the inner coat of the intestines.

Dr. Creveling of Auburn, had seen a similar case which died of apoplexy.

Dr. Mercer thought this might be a case of purpura.

Dr. J. O. Roe, of Rochester, read a paper on the "Relation of Nasal Catarrh in Children to Enlarged Lymphatic Glands of the Neck not Dependent on Scrofula."

Dr. Charles S. Dolley, of Rochester, read the next paper, on "Evidence that Certain Histological Elements Act as Prophylactic Agents," in which the theory was advanced that the best germicides were those elements which tended to develop normal, healthy cells.

Dr. Hicks stated that Dr. Dolley had answered the question why some persons escape in an epidemic of contagious disease.

Dr. E. M. Moore, of Rochester, exhibited an acephalous monster. In the discussion it appeared that the diagnosis in all these cases was extremely difficult; that the fœtus was surrounded by an enormous quantity of amniotic fluid and usually born before term.

The secretary stated that one of his cases attributed her misfortune to the fact that she was frightened, at about three months, by seeing a friend in a fit. She ran into the house crying hysterically and clapped her hands upon the back of her head.

Dr. Mercer referred to the great tenacity of life in these cases. One of his remained alive at least ten hours in a room of freezing temperature.

Dr. A. N. Mead, of Victor reported a case of abortion. The patient had been treated locally by some irregular gynecologist without pregnancy being suspected. Dr. M. asked if the deep violet hue of the vagina and cervix uteri was always and only present in pregnancy.

Dr. Colvin said that that theory had been exploded.

Dr. Starr mentioned a case where there was the violet hue and milk in the breast, without pregnancy, but there was sarcoma.

Dr. E. M. Moore, by request, gave an account of the transactions of the American Surgical Association, of which he had been the president, which lately met in Washington.

Dr. Edward Angell, of Rochester, read a paper on "Reflex Action and its Value in the Diagnosis of Spinal Disease."

Dr. Robert T. Hayes, of Rochester, reported a case of double hare-lip.

Dr. H. S. Behan, of Rochester, reported a rare case of skin eruption in a child, exhibiting photographs and also specimens of the diseased skin under the microscope. The body and face seemed covered with dark patches.

Dr. Elmer, of Syracuse, thought this a case of pemphigus with abnormal amount of pigment. True pemphigus is always fatal.

Dr. James Chapman reported five cases of strangulated hernia. [Will be published in future number.]

Dr. W. B. Ely, of Penfield, reported a case of obstruction of radial artery.

Dr. L. J. Ames, of Mt. Morris, reported a case of reduction of shoulder-joint by laying the patient upon a table, bringing his arm around the doctor's pelvis and by a sudden whirl bringing the shoulder into position.

Dr. Pomeroy, of Newark, reported a case of a lady with cancer; upon discontinuing large doses of morphia the symptoms became worse, but upon returning to its use she improved.

Dr. Colvin referred to the statement that opium eaters do not have cancer.

The president's address was delivered after the lunch at noon, which was served in an adjoining room. [See page 161.]

The following officers were elected: President, Dr. Ely Van De Warker, Syracuse; first vice-president, Dr. J. O. Roe, Rochester; second vice-president, Dr. Lucius Stevens, Syracuse; secretary, Dr. J. N. Arnold, Clyde; treasurer, Dr. Alfred Mercer, Syracuse.

The following were made eligible for permanent membership: Cayuga county: W. R. Laird, Auburn; H. H. Coleman, Kings Ferry. Livingston county: F. H. Mayer, J. B. Dodge. Ontario county: E. O. Hollister, East Bloomfield. Orleans county: John Taylor, Holly; W. E. Bailey, Albion. Onondaga county: H. L. Elsner, Syracuse. Wayne county: F. J. Sherman, Lyons; L. D. Trowbridge, Palmyra. Monroe County: R. M. Moore, Rochester; J. Herriman, Rochester.

The following were made permanent members: Cayuga county: Nettie E. Jenkins, Auburn; C. Barker, Auburn. Monroe county: William R. Howard, Rochester; Franklin Sherman, Rochester. Madison county: Charles L. Furman, Hamilton. Oswego county: P. M. Dowd, Oswego. Seneca county, F. H. Flood, Fayette; Frank Seaman, Seneca Falls.

The society adjourned to meet in Rochester on the second Tuesday in November.

Dr. F. K. Paddock has been elected orator of the Massachusetts Medical Society for the ensuing year. Dr. J. F. A. Adams read a paper on "Sanitary Forest Culture" at the meeting of Wednesday, June 11. Both gentlemen are practitioners in Pittsfield, and were formerly in partnership.

THE ALUMNI LECTURES.

The committee on Alumni Prizes appended to their report on Prize Essays, at the annual Alumni Meeting of March 5, 1884, a recommendation that, instead of the continued offer of prizes for the coming year, an acceptable course of lectures be provided for the alumni, and the following resolution was adopted by the Association:

Resolved, That the Executive Committee are authorized to appoint a committee to secure voluntary contributions from the alumni, and to place all funds collected in the hands of a proper custodian, for investment, and to use the annual income from this fund to secure an acceptable course of lectures, to be delivered to the students and alumni, on Alumni Day of each year and on the day following.

The design of the Alumni Association in providing these free lectures is to furnish profitable entertainment to the sons of the College who come on their annual pilgrimage for the Alumni Day gathering.

The popularity of the celebrated Cartwright lectures inspires the committee to spare no expense in order to present a similar course to our own alumni, which shall be not only valuable, but we trust, widely enjoyed.

In the initiation of this new enterprise the committee have appropriately engaged an alumnus of our own College — William H. Thomson, M.D., A. M. C., '59, who for nearly twenty years has been lecturing in the University of the City of New York, Medical Department, as Professor of Materia Medica and Therapeutics and Diseases of the Nervous System.

Professor Thomson will be in Albany on Alumni Day, Wednesday, March 4, 1885, and deliver two lectures elucidating that absorbing topic which is now the centre of professional interest to both surgeons and physicians — "The Germ Theory of Disease."

It was originally proposed that lectures should be given on Alumni Day and the day following, but it has been thought better to concentrate into one day as much as possible. The hours of the delivery of these lectures will be announced in due time.

In regard to the expenses of this new departure, the committee are pleased to announce that for the current year this matter has been provided for. But, pursuant to the terms of the resolution establishing these courses, the committee desire "volun-

tary contributions from the alumni, and to place all funds collected in the hands of a proper custodian, for investment, and to use the annual income from this fund" for the annual expenses for which the fund is contributed.

Such contributions, and all correspondence pertaining to the Alumni Lectures, may be addressed to Dr. W. G. Tucker, secretary Alumni Association, A. M. C., Albany, N. Y., or to any one of the undersigned committee:

A. VAN DERVEER,
H. BENDELL,
LORENZO HALE.

PERSONALS.

[Brief items are wanted. Direct your postals to THE MEDICAL ANNALS, Albany, N. Y.]

CURTIS—BANCROFT.—On Tuesday, June 3, 1884, at the residence of the bride's parents, by the Rev. L. W. Curtis, of Canaan, N. Y., Dr. Frederic C. Curtis to Charlotte E. Bancroft, daughter of Royal Bancroft.

CURTIS—BANCROFT.—Yesterday afternoon Dr. F. C. Curtis and Miss Lottie Bancroft, both of this city, were joined in wedlock by the Rev. L. W. Curtis, of Canaan, assisted by the Rev. Dr. Holmes. The ceremony took place at the residence of the bride's parents, No. 136 Hudson avenue, and was witnessed only by the relatives and very intimate friends of the contracting parties. The parlors were prettily decorated with flowers in honor of the occasion, and presented a very attractive appearance. Mr. E. O. Mather, and Mr. S. H. Cornwell, of Hartford, acted as ushers. Very many beautiful and useful presents were received from the friends and well wishers of the happy pair. Dr. and Mrs. Curtis left on their wedding tour during the evening, and on returning will make their home in this city.—*Albany Argus*, June 4.

Dr. C. S. Merrill, with Mrs. Merrill and their child and nurse, and his sister, Miss M. Agnes Merrill, of Vermont, take passage on the "City of Berlin" on the 21st inst., to be absent two months. The doctor will visit the universities and hospitals where he studied thirteen years ago — London, Heidelberg and Vienna. During his absence his assistant, Dr. Kilbourne, will have charge of his office and attend those needing eye or ear treatment.

Dr. Van Derveer, Mrs. Van Derveer and Edgar, their son, sail on the "Oregon," of the Cunard line, June 27. They leave Albany June 25, to return the first week in September.

Dr. P. E. Fennelly, '69, has been appointed health officer of West Troy *vice* Dr. Dolan, '77, deceased.

Dr. Charles S. Starr, office and residence, 77 East avenue, Rochester, N. Y.

Dr. G. A. Bradbury, '83, resident physician, Albany Hospital.

Dr. C. A. Gillette, '83, general agent *Syracuse Standard*.

Dr. Edwin B. Karner, '83, Stockport, Columbia county, N. Y.

Dr. Louis N. Lanehart, '83, Rensselaerville, Albany county, N. Y.

Dr. J. Charles La Dow, '83 Mechanicsville, N. Y.

Dr. Fred. L. La Due, '83, Elburgh Springs, Vt.

Dr. C. P. M'Cabe, '83, Greenville, Greene county, N. Y.

Dr. Joseph Riley, '83, Greenbush, Rensselaer county, N. Y.

Dr. Theobald Smith, '83, Department of Agriculture, Washington, D. C.

Dr. A. R. Thompson, '83, Troy Dispensary.

Dr. J. H. Skillicorn, '83, 324 Hudson Avenue, Albany.

Dr. J. Leslie Smith, '83, Vienna, Austria.

Dr. J. D. Van Patten, '83, Canajoharie, N. Y.

DEATHS.

Dr. M. R. Peck, '51, Glens Falls, N. Y., died suddenly of heart disease, at that place, April 4, 1884, aged 60 years.

Dr. William M. Armstrong, '82, died at the residence of his father, at Edinburgh, Saratoga county, N. Y., on the 31st of May, 1884, aged 26 years. He had been a student under Dr. J. F. Blake, of Northville, N. Y., and later under Dr. L. Balch, of Albany, and was well trained for professional work. A serious condition of the lungs developed after but a few months of practice. He returned from a second winter at the Bermudas on the 13th of May, knowing that the end was near, but with Christian faith to meet it, while sorrowing to leave his young wife and child and his father's house.

Dr. William E. Dolan ['77], health officer of West Troy, died June 9, 1884, aged 28 years, after suffering since Sunday from a stroke of paralysis.—*Albany Evening Times*, June 10.

THE MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

F. C. CURTIS, M.D., A. VAN DERVEER, M.D., LORENZO HALE, M.D.,
JNO. BEN. STONEHOUSE, M.D., WILLIS G. TUCKER, M.D.

VOL. V. JUNE, 1884. No. 6.

——COMPLIMENTS AND CONGRATULATIONS are extended to our associate, Dr. Frederic C. Curtis, who was married June 3, as is noted in our "Personals."

"A father
Is at the nuptial of his son, a guest
That best becomes the table."

But, in the case of Dr. Curtis, the ceremony itself was performed by the bridegroom's father, a Congregationalist minister from Canaan, N. Y.

LESIONS OF THE BRAIN IN THE INSANE.

It is remarkable to what an extent the idea is prevalent among professional men, as well as the laity, that by an examination of a recently removed brain, lasting perhaps an hour, the question of sanity or insanity can be determined. The truth is that gross changes in brain structure are only exceptionally connected with mental disease, and characteristic lesions are only discovered after careful preparation and examination by microscopists especially trained for this department of pathology. To show how unsettled this whole subject is, it is simply necessary to recall the fact that many of the lesions which have been described as characteristic of insanity, such as the exaggeration of the pericellular and perivascular spaces and the presence of "colloid spheres," have been proved to be simply the results of the handling and preparation of specimens. But even if there was as little difficulty in recognizing the characteristic morbid appearances of insanity as there is in an ordinary case of pneumonia, their absence in a certain case would not determine the sanity of the person, for, as Dr. Spitzka states in his "Manual of Insan-

ity," "the likelihood of finding characteristic structural changes in the insane brain may be represented as follows: In true and recent mania that likelihood is as 5 : 100; in acute melancholia it is almost zero; in epileptic insanity it is as 20 : 100; in monomania it is as 5 : 100; in the terminal states it is as 60 : 100; in imbecility and idiocy as 80 : 100; in paretic dementia it reaches the figure 99+ : 100." Several cases have lately occurred of alleged insane homicides, whose sanity has been officially determined by an autopsy lasting two or three hours, the examination of the brain occupying only a fraction of that time.

These remarks must not be considered as referring to the recent distressing tragedy in this city. Dr. Classen, the coroner's physician, when before the jury, was asked as to the condition of the brain and the probable mental status of the woman. His very proper answer was that, although the brain appeared to be normal, no idea as to her sanity could be gathered from that fact. He then referred to the statistics of Pinel's autopsies, showing how few brains of even chronic insane exhibited lesions which could be considered characteristic. J. B. S.

——An attendant at the Utica Asylum has been convicted of manslaughter in the second degree. This is well, but would have been better if it had been brought about by the asylum authorities and without the necessity of a legislative investigation. J. B. S.

——The Alumni Association of the Albany Medical College is to be congratulated upon having secured for the first course of the proposed annual Alumni Lectures an alumnus of our own College, Dr. W. H. Thomson, of New York city.

Dr. Thomson is professor of Materia Medica and Therapeutics and Diseases of the Nervous System in the University of the City of New York, Medical Department, and is also visiting surgeon to Bellevue Hospital. This diversified range of duty is characteristic of the capacity of the man. For nearly twenty years his own classes, and also graduates of other New York colleges who have purposely taken pains to hear him, have extolled him as peculiarly clear, competent and clever in the matter and manner of his customary instruction.

These free Alumni Lectures, which are elsewhere officially announced, will not only be a novel feature in our Alumni Day exercises, but an attractive entertainment of great value.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.

Discussion on the Question of State Medical Examiners.

A special meeting of the Medical Society of the County of Albany was held in Alumni Hall, February 1, 1884.

There were present Drs. Bartlett, T. P. Bailey, W. H. Bailey, Ball, Bendell, Bigelow, Boyd, H. S. Case, R. D. Clark, Crawford, Culver, Curtis, Devol, DuBois, Freeman, Hale, Hall, Hays, H. Hun, Jos. Lewi, M. J. Lewi, March, Merrill, Morrow, Murray, H. S. Paine, R. H. Sabin, Snow, Townsend, Trego, Van Derveer, Ward, Woodward—33. Guests: Hon. S. S. Cartwright, M.D., of Roxbury, Delaware county, N. Y., and Dr. H. M. Paine, of Albany.

The meeting was called to order at 9 o'clock P. M., by President Bendell, who stated the object of the meeting to be the reception of the report of the Committee on Legislation and the consideration of a certain bill pending in the legislature.

Dr. Van Derveer introduced Dr. S. S. Cartwright, Member of Assembly from Delaware county and chairman of the Assembly committee to whom was referred the bill to be considered this evening.

Dr. Cartwright, upon being recognized by the President and invited to speak, said: With your permission I prefer to be a silent listener to your discussion this evening. I thank you for your kind invitation.

Dr. Ward: Mr. President, in view of the fact that there is a hopelessly irrevocable difference of opinion among medical men as regards the bills introduced in the legislature, and in view of the fact that the legislative committees, after having given two hearings to the advocates and opponents of the bills, have concluded to do nothing more with them, it seems utterly useless for us to spend time in considering them further. I therefore move we adjourn.

This motion received no second.

Dr. Cartwright: The committee were considering the matter, but had as yet made no recommendation.

Dr. Ward then withdrew his motion.

Dr. M. J. Lewi, from the Committee on Legislation reported as follows:

The Committee on Legislation would respectfully report that three bills have come to their notice, which, at a meeting held January 26, were considered as to the one containing the most salient points for regulating the practice of medicine in the state of New York. A great diversity of opinion was manifested by the members presens. The undersigned would state that they are heartily in favor of the best measure to protect the practitioner of medicine from being forced to recognize, by law at least, persons who are graduated from some of the chartered medical colleges of the state whose diplomas are obtained, in some instances, after a three months' course of study. We believe that the best method for elevating the standard of medicine in our state, with the fact staring us in the face that many persons singularly unfitted to follow a calling which requires skilled ability are being yearly graduated as doctors of medicine, is to appoint a supervising board which shall determine how capable the doctor is who graduates from these manufactories to practice medicine amongst the general public.

Although containing defects, the bill presented by the Committee on Legislation of the State Medical Society seems, if properly enforced, to be able to accomplish this purpose, and we therefore recommend that the Medical Society of the County of Albany lend its influence in the endeavor which is being made to make the provisions of this bill the law of the state.

MAURICE J. LEWI,
F. C. CURTIS.

Upon motion of Dr. March the report was accepted.

Dr. WARD, from the same committee, presented a minority report, as follows:

The undersigned members of the committee of the Albany County Medical Society, which has had under consideration the bill recently introduced into the Assembly of this state, at the request of the Legislative Committee of the Medical Society of the State of New York, would respectfully report that they have carefully read and considered each and all of the sections and provisions of the bill, and do not feel that they can recommend to the County Society to advocate its passage. While we fully agree with the promoters of this bill that the citizens of this state are entitled to, and should have, ample guarantee that those licensed to practice medicine are fully competent and trustworthy, yet we think that some of the provisions of this bill would throw unnecessary impediments in the way of those desiring a license to practice; and, while many of the objects at which the bill aims are eminently desirable, the document as a whole is impractical in its details.

SAMUEL B. WARD,
WILLIS G. TUCKER.

Upon motion of Dr. Lewi this report was also accepted, the reports of the committee being before the house.

Dr. VAN DERVEER: For three years and more the profession in this state have been working for the end aimed at in the bill under consideration. At its annual session in 1883 the Medical Society of the State of New York instructed its Committee on Legislation to perfect a bill of this character. They have done so, and it has been introduced in the legislature. Committees from the Senate and Assembly have given us a hearing, and we ought now to discuss it in order to familiarize ourselves with its provisions, and record our favor of or opposition to it. There has never been a better Committee on Public Health than we have now in the Assembly, of which our friend here, Dr. Cartwright, is chairman; the committee from the Senate to which this bill was referred is a good one; we have a good Governor, and it seems a favorable time for the passage of the proper kind of a bill.

Dr. M. J. LEWI: I most earnestly advocate the bill just referred to. It is favored by such men as Drs. Sturgis, of New York, Van Derveer, of Albany, and Moore, of Rochester; while opposed to it are such men a R. V. Pierce, Henion, Gun and Drs. Flint and Loomis. It is opposed by all the most ignorant and incompetent men. The opposition of such persons ought to cause us to advocate it. The bill does not prevent colleges from graduating as many men as they please, and properly educated men from good colleges will have no difficulty in fulfilling its requirements.

The names of Dr. Dalton, of New York, and Dr. Moore, of Rochester, have been mentioned in connection with the faculty provided for in this bill. These men, with others like them would make a good faculty, and we may be sure that fairness would characterize their action. The bill is not sectarian, for it provides that all the systems shall be represented. While it has so many good features, it is not altogether free from defects.

As it stands now students in medical colleges at the present time are included in its action; this, Dr. Cartwright just informs me, is to be remedied. They ought to be exempted from its requirements. Another defect is the defining the words "practice of physic and surgery." But there is one thing upon which we are all agreed — there should be a stop put to the influx of incompetent men to the profession, and to effect this some such law is necessary. On the continent, from Gottingen to Vienna, we find such regulations existing as are comprehended in this bill, and it seems proper that we should have them in this state.

Dr. SNOW moved that the recommendation of the Committee on Legislation be adopted as the sense of this Society. Seconded by Dr. T. P. Bailey.

Dr. WARD: Before such a motion is voted upon something ought to be said against the bill recommended by the committee. No one desires the better education of persons entering the profession more than I, not because there is very much for us to fear from the poor practitioner, as has just been implied, but because the duties devolving upon the physician and surgeon demand a good education for their performance. I might favor a bill making a three years' course obligatory. If it is thought desirable to increase the number or improve the quality of lectures, I am heartily in favor of it. This College (the Albany Medical College) requires a thorough preliminary education, has written examinations once each month, and it endeavors to inculcate habits of succinct writing, close thinking and accurate expression. Thoroughness characterizes the teaching and curriculum, and its students ought not to be obliged to pass another examination. Again, this bill will work hardship to the student. The additional expense as the matter now stands is forty dollars. (Dr. Cartwright informs me this has been changed to twenty-five dollars.) Even this is too much. I knew a student once who walked sixteen miles every day to save expense. Such a student could not pay twenty-five dollars in addition to the other expenses necessary for graduation. Besides, this fee of twenty-five dollars, in many cases, does not cover more than half the expenses, for we must reckon traveling expenses to and from the place of examination and board while staying in the place. If there does not happen to be a quorum of the faculty present, and consequently no examination, this will make no difference; the student will have these expenses to pay all the same. Again, such examinations are not a fair test of a student's knowledge. A superficially bright man may pass, while another much more thorough, but with less *sang froid*, may absolutely fail. This bill would divorce the teaching from the examining element, and here it fails. Teachers take account of the man as he appears before them day after day; they observe if he is studious, honest, reliable; such make the best practitioners; but of these facts this faculty must of necessity be ignorant. I do not wish to appear factious, but certainly I think this bill is too stringent, and it will not raise the standard of the profession, which is the thing we all desire. Again, this bill will no sooner have passed than its advocates will be clamoring for changes to be made in it. In fact, they have already had to strike out the clause prohibiting the use of patent medicines. We have no right to forbid men taking patent medicines. The clause, also, requiring a unanimous vote to pass a candidate has had to be altered, and even now it places

the regular profession in the hands of the Homœopaths or Eclectics.

The bill favored by the colleges has defects, but is is much more desirable than this one. In the first place, it works less hardship to the students, since it requires the payment of only five dollars to enable him to come up for this examination; and, since the members of the state faculty are to meet with the college faculty, there will be no traveling expenses for him to bear, no extra board bills for him to pay, and but one examination for him to pass. This latter is a thing to be considered. We who have been some time in practice have ideas of our own, can stand examinations, and are able to speak for ourselves with confidence. This is not the case with students; they would be much more likely to do themselves justice if this faculty sits with the teachers than if they had to appear before them alone. The base suggestion that these colleges will endeavor to exert undue influence upon this faculty is as senseless as it is untrue. It is an unnecessary slur upon honest men.

Dr. DEVOL: I doubt the doctrine of future probation in theology, and in medicine I don't believe in too much legislation. We must confess that we are all in the same humiliating position — we have too many incompetent practitioners, and we are all obliged to meet them. This bill proposes to remedy this, but in doing so it charges the colleges with not graduating good men, and puts restrictions on them. Students at any college may graduate, but they cannot practice; they must pass another examination before they do that. Now, I have a most profound respect for medical teachers. After a practice of over fifty years, I look back upon my preceptor with tender feelings of respect. Some teachers may not be qualified to perform their duties. If there are any such, apply the remedy there, but do not cast reproach upon the great body of teachers by such a bill as this. I would rather carry a hod than hold a professorship in an institution where the diploma was worthless. I think every professor in the colleges of this state should assert his dignity by opposing this bill.

Dr. VAN DERVEER: The patent medicine clause, to which reference has been made, came up in connection with the "drug bill" some years ago; it got into this bill, but it was soon found to be impracticable, and was left out, as it was evident that it would kill the bill. In regard to the constitution of the board of examiners, it was originally proposed to have three separate boards, viz., Allopathic, Homœopathic and Eclectic, but upon further consideration it was believed best to have it the same as in other states. The bill was drawn by Mr. Ripley, who for some years past has been engaged so successfully in prosecuting illegal practitioners in New York city and elsewhere. His labors in this direction have made him conversant with all the various laws upon the subject in this and other states, and we may feel quite sure that the bill is a safe and proper one. But do we really need such a bill? Dr. Ward says, "No." Now, students from the College of Physicians and Surgeons, New York, and, in fact, from any first-class college, need have no fear as to fulfilling the requirements of this bill; but diplomas, or endorsements upon diplomas, are not in all cases a guarantee that the holder is competent to practice physic and surgery. Even Dr. Flint acknowledges that diplomas have been palmed off upon him, and this may be the case with other colleges. We certainly need

some such bill; but the colleges' bill, to which reference has been made, is worthless, for section 7 of that bill practically nullifies the whole bill. There are now four bills up for consideration — the "State Society bill," the "colleges bill," a compromise bill between Bellevue and the University and the bill of the Eclectics. Only the first two have been introduced into the legislature, and of these the first is the only safe one.

Dr. WARD: I submit, Mr. President, is it wise when there is such a diversity of opinion on this subject as is indicated by there being four bills on the tapis — is it wise for this Society to commit itself to any one of them at the present time?

Dr. W. H. BAILEY: Some of these bills are most curiously constructed; the mere hearing of them would decide in favor of the State Society bill. That there are some very erratic men in the profession we must confess; there always have been and there always will be. These men ought to be educated, that in their wanderings they may not fall into error. Much has been said to-night about this second examination. We now have a Board of Censors before whom students have to appear before they receive their diplomas, and I have never heard that this is objectionable. Why, then, object to state board of examiners?

Dr. WARD: There has been a good deal said about the erratic men opposing this bill. The fact that there are such members opposing it shows conclusively that there are very serious objections to it. As for the character of the men, I am perfectly willing to be classed with such men as A. C. Loomis, Austin Flint and John G. Curtis, of New York city.

Dr. F. C. CURTIS: The profession has been calling for this bill for several years, and the adoption of some such bill is desirable for several reasons. In the first place, the profession needs it. It will elevate the profession and put its members upon a uniform footing. Entrance to the profession will then be by one avenue, instead of many, as now. I know a man who asserts himself and assumes to be a *confrere* of ours; he was a nurse in a hospital, disappeared for a short time, got a diploma, I don't know how, and now extends his hand and greets you with the greatest assurance. He is a man, and we treat him as such, but it is lowering the dignity of a most worthy calling to have him a member of it. In the second place, the people need to have some such bill as this enacted. It is desirable that they shall feel whenever they have occasion to call a physician or surgeon that they are calling someone who is competent and in whom they may have confidence. Objection has been raised to the bill on account of the extra fees required by it and on account of its stringency. Students now in college will be excluded from its action, and those we enter later will enter with their eyes open, and will be prepared to meet the requirements. No college, if reputable, is to be injured by it any more than an honest man is injured by a law against stealing.

Dr. HAYS: I am in favor of the bill. It is true there are objectionable features in it, but it seems to me they can be obviated. Twenty-five dollars is too much to pay for the examination; it ought not to be more than enough to cover the actual expenses. Traveling expenses are a considerable item; but in the English examinations the Board of Regents travel and examine in different places. Why not in this?

Dr. VAN DERVEER: In answer to some of the remarks made by the last gentleman, I may say that these points have all been considered. It was found that it would be impossible to pass a law the operation of which would cost the state any thing; and a consideration of the matter as regards the states which have a law similar to this in operation, Illinois for example, shows the cost of maintaining an examining board to be about $18,000 per annum. The expenses amount to about twenty-five dollars a day. As regards the Board going from place to place to examine, the time occupied would be too great and the expense too much. The plan of a visiting board has received no endorsement, while the state bill as introduced to the legislature, has received the endorsement of several county societies.

Upon motion of Dr. Hale, the privileges of the floor were extended to Dr. H. M. Paine (Homœopath). Upon the invitation of the President,

Dr. PAINE said: Evidence of the necessity of some such law as the one under consideration is found in the records of the "old school" for the past forty years. Dr Townsend, in his report some twenty years ago, said there had been sixty requests for improvement in medical education. He reported that the system was so bad that it could be no worse. The method proposed by the present bill is very similar to the system of examination which prevails abroad, and much the same plan might be adopted. There they give the same questions that have been given in the colleges. For example, the subject is "Bright's Disease." The student is expected to tell all he knows about it. If, at the time for holding the examination, a member of the board is absent, rather than defer the examination, it would be well for the board to appoint a substitute. There is a defect in the construction of the board as provided in this bill; there ought to be three Homœopaths upon it. The functions of the board being executive, the representatives of the various systems ought to be as nearly equal as possible. The United States Senate is made up by representatives of the several states, and preserves this condition. This examining board represents systems, and should preserve an equality. The Homœopaths will support this bill if they are given the proper representation on the board, because they believe the standard of the profession will be elevated by it. Improvements in Twenty-third street and Bellevue schools are largely due to the agitation which has resulted in the framing of this bill. Other colleges ought to be made to come up to the higher standards, and they will be by some such method as the one indicated by this bill. Another good accomplished by this bill would be the limitation in the number of persons admitted to practice.

Dr. FREEMAN: As our committee are divided in opinion as to the merits of this bill, and we here present hold differing views, I move, as an amendment to the motion of Dr. Snow, that all action in the matter be deferred until after the meeting of the State Society.

The amendment being put, was lost.

The original motion was then carried.

Dr. CURTIS moved to make the adoption unanimous. Lost.

On motion the Society adjourned at 10.30 P. M.

E. A. BARTLETT, M.D., *Secretary.*

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THE DIAGNOSTIC AND PROGNOSTIC VALUE OF THE BACILLUS TUBERCULOSIS IN THE SPUTUM OF PULMONARY DISEASES.

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[FOR THE MEDICAL ANNALS.]

A full account of Koch's researches into the etiology of tuberculosis has been recently presented to the world.* All but a very few have come to accept his conclusions that the etiological factor of tuberculosis is an organized contagion which will grow in artificial media, induce the disease by inoculation or inhalation in animals, and which is demonstrable by the microscope. Since the first announcement of Koch's discovery, in March, 1882, the interest of the medical profession upon this subject has grown steadily deeper, and great activity has been manifested everywhere in adapting the new facts to the amelioration or eradication of that fearful disease which more than decimates the race. But many problems must yet be solved before such results can be realized. The tide of investigation has taken, as yet, the direction of diagnosis and prognosis only. The necessity of coöperation between the clinical teacher and the scientific investigator is nowhere so clearly shown as here. Neither can dispense with the services of the other, if medical science is ever to shake off wrong theories and make any true progress.

* Mittheilungen aus dem Kaiserlichen Gesundheits amt, II. Berlin, 1884.

It is well known that the *Bacillus* (or *Bacterium*) *Tuberculosis* has been found in the sputum of those suffering from phthisis. These micro-organisms have come from the tubercle; in the early stage of its growth they occupy chiefly the protoplasm of the giant cells. Degeneration and caseation gradually overtaking the new growth, the discharge of the softened mass into the bronchus brings the bacilli, mixed with the secretions of the air passages, under the observation of the physician. Is the presence of these bacilli* a sign of real diagnostic value? Is there any fixed relation between the abundance of the organisms in the sputum and the gravity of the disease? These are the questions which are now being solved not so much in private practice as in hospitals and laboratories where careful, continuous examinations of sputa can be carried on. If it can be proved by the evidence of gradually growing statistics that the bacilli are almost invariably present in the sputa from tuberculous lungs and that they are as invariably absent in lesions of the respiratory apparatus other than those of tuberculosis, the differential diagnosis of lung affections will have made a most important step in advance.

An examination of the medical literature of the past two years reveals a number of valuable series of investigations destined to aid in solving the questions proposed above. Ziehl† found in seventy-three cases of phthisis only one in which the characteristic bacillus could not be found in the sputum. He gives several illustrations, of which the following is the most striking: A woman, 32 years old, was afflicted with stenosis of the larynx. The swollen epiglottis was covered with an ulcerated mucosa. The diagnosis, based in part upon the testimony of past history, was, at first, syphilis. When, later on, tracheotomy had to be resorted to, the secretions from the canula were free from bacilli. The secretions from the larynx, however, furnished them in abundance. Death soon followed. On examination the larynx was found invaded by tuberculosis, while miliary tubercles were beginning to form in the lungs, kidneys and some other organs. Fraentzel‡ extended his observations to 380 cases. In only five of these, bacilli were absent, and in three of these five cases the autopsy demonstrated the absence of any caseous infecting centres in the lungs. Moreover, repeated investigation failed to

*The word *Bacillus*, used hereafter, refers simply to the *Bacillus Tuberculosis*.
†Deutsche Medizinische Wochenschrift, 1883, p. 62.
‡Loc. cit., p. 245.

show bacilli in other lung affections, so that the author regards their presence a certain diagnostic sign. Prudden* gives a record of fifty-eight cases, the sputa of forty-six of these containing the characteristic parasite. In forty-one of these forty-six, cavities were present. Of these twelve negative cases four had cavities. All excepting one passed from notice, and at the autopsy of this case "myriads of bacilli were found imbedded in dense cheesy nodules in the lungs." In nine cases of bronchial and pneumonic affections bacilli were absent, while in six cases of pneumonic phthisis they did not fail to appear. Gessler† reports 100 cases, in all of which the presence of bacilli confirmed the diagnosis. Of several differential diagnoses the following is worthy of note: A man, aged 21, presented many of the symptoms of phthisis; no bacilli, however, could be detected in the sputum. Death ensuing upon a hemorrhagic peritonitis, which had been the cause of his entering the hospital, the necropsy revealed general carcinoma of the lungs. The right apex dullness, detected during life, was caused by an adhesion. Gaffky‡ made daily examinations of the sputa of fourteen patients for periods varying, with different patients, from twenty to one hundred and thirty-four days. A survey of the voluminous tabulated statistics thus obtained informs us that in ten cases the bacilli were absent in from one to five days only. In the rest they were missed oftener. In one mild case the bacilli were found only on four out of eighty-two days. An intercurrent peritonitis carrying off the patient, the autopsy revealed a healed tuberculosis and slaty induration of the lungs.

M. Germain Sée § lays especial stress upon the diagnostic value of the bacillus in the sputum of doubtful cases where the evidence furnished by physical signs is insufficient or conflicting. He classifies such cases under three heads: (1) Latent forms (phthisis with the character of a dry catarrh, miliary phthisis with the symptoms of typhoid fever); (2) masked or abnormal forms (acute bronchitis, accidental laryngitis, simple pleurisy); (3) forms of pseudo-phthisis (pulmonary syphilis, bronchial dilatations, bronchial catarrh, simple or accompanied with pulmonary induration). In one, out of the many interesting cases reported by him to illustrate his classification, the symptoms, both sub-

* The Medical Record, 1883, p. 398.
† Deutsche Med Wochenschr., 1883, p. 497.
‡ Mittheilungen a. d. K. Gesundheetsamt, II., p. 126.
§ Bull. de l'Acad. de Medecine, Paris, 1883, p. 1405; 1884, p. 94.

jective and objective, pointed decidedly to a tuberculous disease of the lungs. The abundant muco-purulent expectoration, however, contained no bacilli. At the autopsy several bronchial dilatations, with sclerosis of the pulmonary tissue here and there, but no tubercles whatever, were found. Coze and Simon* have recently affirmed the results of other observers. They have found in their cases, embracing both early and advanced stages of phthisis, the tubercle bacillus always present, while in other lung affections it could not be found at any time. In England, Gabbett† gives a synopsis of sixty-five cases in which the presence of the bacillus in man harmonized with the diagnosis in all cases. Of forty-five other instances, in which, with the exception of two or three doubtful cases, the disease was regarded as not tuberculous in its nature, the absence of the parasite was equally constant.

Coming to our own country, we find that observations have not been made as regularly or with that system and perseverance characterizing the work in continental countries. There are, however, notable exceptions. I have already mentioned Prudden's painstaking observations. Dr. Flint,‡ recently referring to the examinations of sputa made by his assistants in Bellevue says: "The results, taken in connection with the histories, the symptoms and the physical signs have satisfied me that the bacilli in the sputum may be relied upon as proof of the existence of tuberculous disease. . . I am led to believe that if repeated examinations, made with sufficient care, show the presence of the parasite, the diagnosis of phthisis is positive; and, on the other hand, if, on repeated and careful examinations, bacilli be not found, phthisis may with much probability be excluded." He then adds: "I return to predict that the time will soon come when, in order to corroborate the diagnosis and as the hinge on which the question of diagnosis will turn in certain cases, microscopic examination of sputa will be considered to be as much a matter of course as examinations of urine for evidences of renal disease."

A careful scrutiny of the above cited statistics shows (1) that there is already a large amount of evidence accumulating from various sources which tends to demonstrate that the presence of the *Bacillus Tuberculosis* in sputum may be regarded as a true

* Journ. de Micrographie, 1884, p. 233.
† British Med. Journ., 1884, April 26.
‡ Medical News, 1884, p. 62.

indication of tuberculous processes going on in the lungs, and that in those cases in which the bacilli cannot be detected the physical signs almost invariably point to some other disease. If there is a conflict of evidence, the presence or absence of the organism ought to decide the question in most doubtful cases. It must be carefully borne in mind that only an extended series of examinations in negative cases is at all to be relied upon; (2) that the failure to find the parasite does not admit in a few cases a definite interpretation. The tubercles imbedded in the lung tissue may contain the bacilli in abundance, but only when caseation and destruction of surrounding tissue have advanced sufficiently to cause rupture of a bronchus and consequent discharge into it of the diseased products, are the bacilli accessible in the sputum. In other words, the disease may not have reached the period of expectoration, or it may never reach it. There may be foci of tuberculous infection in other organs from which evidence cannot be obtained during life.

When we look over the labors of those who have attempted to prove a direct relation between the number of bacilli present in the sputum and the gravity of the disease, we find very little to encourage us in admitting the truth of the theory. The majority of observers cited above confess that the facts do not warrant any such assumption. It may be possible to determine, in general outlines, the progress of the disease by examining the sputa once or twice daily for a long time. The scarcity or entire absence of the bacilli might be interpreted either as a mild form, a recovery, or a retention of the caseous products in the lung tissue. A great abundance might indicate the breaking through of a softened focus into the air passages, or it might merely represent their active multiplication in cavities already formed, harmless, unless carried off into blood and lymph channels to produce new disease centres in distant organs. Finally, a gradual diminution in the quantity of bacilli expectorated might indicate that the outward discharge of a certain focus had ceased, while it would give no information of the possible presence of other latent foci. Fraentzel,* who has been the strongest advocate of the view that the bacillus is of real prognostic value, admits that he has found exceptional cases in which numerous bacilli accompanied a disease of slow progress and no fever. Another observer† cites four cases in which there was

* Loc. cit.
† Loc. cit., 1884, p. 196.

good condition, in one case rapid improvement, while the bacilli in the sputum continued abundant.

If, therefore, there is as yet little evidence to support the prognostic value of the bacillus tuberculosis, we may cling with greater faith to its value in diagnosis. Let our hospitals and pathological laboratories become equipped with the means of testing these questions, and those who have charge of private cases will not fail to seek there the confirmation of their diagnosis, and thus swell and perfect the statistical evidence in a most important field.

[An article on the "Demonstration of the Bacillus Tuberculosis in Sputum" will follow in next number.]

May, 1884.

PROPHYLAXIS OF THE PARTURIENT BREAST.

BY FRANKLIN TOWNSEND, M.D., ALBANY.

[FOR THE MEDICAL ANNALS.]

More or less frequently does the practitioner meet with conditions of the parturient breast which tax his skill and ingenuity to the utmost in bringing about that issue which shall conduce to the welfare of his patient and her offspring. Indeed, often is the latter, through the medium of a Providence, removed early, before even the lacteal secretion has begun, and therefore the demand for the same is no longer present. At the same time, though, the physiological relation holds; and, if the secretion of milk, which is pretty sure to show itself sooner or later, be not withheld, the breasts must become engorged to an extent which, if not controlled, leads to serious inflammatory processes. Again there are oftentimes various forms of disease and distortion affecting the nipples which are liable to resist the most skillful treatment, and which eventuate in involvement of the whole gland in an acute inflammation, followed frequently by abscess, and possibly terminating in dangerous malignancy. The condition termed "galactorrhœa," which embraces the form "mammary diabetes" is still another danger which is more or less frequently encountered, and one which, if not subdued, may lead to critical results not only to the mother, but the infant also. When phthisical tendencies are marked, such affections are peculiarly trying and dangerous.

The above, then, are some of the more important factors which lead to the measures about to be described, which, when briefly summarized, would be thus represented, and must be dealt with, each one separately:

1. Birth of still-born child before lacteal secretion has commenced.
2. Death of child after lacteal secretion is in full tide.
3. Galactorrhœa.
4. Diseases, malformations and distortions of nipples.
5. Neuroses.

The necessity of "drying up the milk" in the first instance, that is, where the mother has given birth to a dead child, and before such secretion has formed, we must all be cognizant of. Indeed, no more fitting time and opportunity can be presented for such a measure to be begun, for the breasts are, as a rule, almost completely free from any great accumulation of secretion, either of mucous, colostrum or milk. It is true that the enlargement of these organs, which is more or less characteristic of the pregnant state, is usually accompanied not only by increased development in their glandular structure, but also during the latter months of gestation by a greater or less secretion, which is usually estimated as milk. The quantity is, however, small, and although it may in some cases be forced in jets from the galactiferous ducts, there is no accumulation of the fluid in their ampullæ. In most parturient women, as is well known, no marked alteration in the quantity of this secretion is manifested till after the lapse of a few days. It is true that the glandular structures of the mammæ during the latter half of pregnancy become so far developed that, were premature labor to ensue, say at about the seventh or eighth month, the lacteal secretion (the stimulus now being given) is generally established at the usual period after parturition. There is an interval, then, between the birth of the child and the full appearance of the secretion of milk from the mother's breasts, the latter depending upon a certain nervous stimulus; and it is *during this interval* that the best results may be obtained, either by mechanical or therapeutical means, in completely obliterating further physiological secretion from these glandules. To comprehend more fully the importance of seizing the opportunity as afforded by this interval can only scientifically be traced through the intricate labyrinth of physiological research. The secretion

of milk consists, in all probability, in the formation within the glandular cells of the specific constituents of milk—sugar, casein and fat—out of the materials transmitted through the walls of the blood vessels and the liberation of those constituents by the disintegration, or some similar process, of the cell walls. In the case of fat, this has been directly shown to occur, the innermost layers of the cells having been observed to become more and more nearly filled with fat in the same manner as in any secretion of sebaceous material. These cells, already laden with fat, do either one of two things, that is, disintegrate or — and which is the more likely — get rid of their contents by contracting, and, thus set free, the globules become emulsioned in the fluid which is brought to the gland by the blood vessels in their extreme active fluxion. At the beginning of the period of lactation, in the colostrum, or "first milk," certain round, unbroken, fat-laden cells (colostrum corpuscles) show themselves. These at first are the only bodies present floating in their respective media, and their appearance is not marked by any change in the activity of the circulating current. After a short time, however, their place is taken, though only gradually and never entirely, by the milk corpuscle or globule proper. From the above it may be readily seen that the secretion of milk in the mammary glands is dependent upon metabolic phenomena almost entirely, and it is to the activity of such changes that its increase is largely due (at first passive and quiet during the formation of the colostrum) to a state of hyperæmia and great activity, with elaboration of milk globules. That such a decided transition from the passive to the active glandular state is under the control of the nervous system must be admitted, but what this nervous mechanism precisely is has not, as yet, been demonstrated.

Granting, then, a time which may be utilized for the prosecution of our treatment, these questions may be asked:

1. What method or methods are the most prompt and efficient for controlling the lacteal secretion?

2. What is their *modus operandi?*

To the first question we would say that by mechanical pressure *alone* are we enabled to combat perfectly any further flux from the gland; and, secondly, by the action of certain drugs like belladonna and iodide of potassium, with ergot, a similar result may be obtained, though more or less perfectly in comparison. Indeed, it is advised that *both* methods be applied *conjoined.*

The following is the authors plan of carrying out such forms of treatment:

1. Remove by gentle manipulation any traces of secretion from the breasts.

2. Place over them, *including* the nipples, the officinal belladonna plaster, made fresh and spread on kid.

3. Elevate the glands as high as possible, and direct a strip of adhesive plaster, two and a half inches wide by from two to two and a half feet long, from just above the iliac crest of one side of the body, across the chest, pushing firmly upon the breast of the opposite side, thus raising and flattening the gland against the underlying muscles and ribs, finally bringing the strip over the shoulder of the same side and attaching it closely to the skin below the inferior angle of the scapula. The same directions will apply to the application of the strap to the opposite breast. It will be noticed that the straps cross one another over the median line and possibly so high as to be uncomfortably close to the neck. If such should be the case, cutting away a strip at this point and interposing a small strip of cotton batting at the junction of the straps will be all that is required.

4. After a day or two possibly the straps may loosen a trifle, and, such being the case, it is only necessary to make greater tension, by raising the straps from behind free from the shoulders, and, pulling until the breast is as high and flat and hard as previously, the straps may again be made adherent to the skin below the scapula. This procedure may be repeated as often as is found necessary, though usually one *perfect* strapping is all that is required.

5. On the second or third day it is a wise plan, in our estimation, to give a dose of magnesia, compound liquorice powder or even an enema; at all events, a movement from the bowels seems imperative at this time.

6. On the eighth or tenth day the strapping may be removed entirely, when there will be found little or no secretion of milk in the glands and no tenderness of these organs.

In our second example, viz., death of a child after full establishment of the secretion in both breasts, we are at once confronted with a dissimilar physiological condition and one which must of necessity call forth a different plan of treatment from that already maintained. We saw, when speaking of the physiology of the lacteal secretion, that the passive elements were

expressed particularly in connection with the metabolic elaboration of the colostrum, and that the greater activity was manifested in the glands when the milk globules began to preponderate. Now, the secretion, as a whole, preserves the characters of colostrum until the end of the so-called "milk fever" period, when a very rapid disappearance of the colostrum corpuscles takes place, and the milk globules become vastly more numerous and regular, as well as uniform in size. After the eighth to the tenth day the colostrum disappears, and the secretion of milk may then be said to be fully established. Possibly after the tenth day a few colostrum corpuscles and masses of agglutinated milk globules may be found, but these are extremely rare, and after the fifteenth day there is no further sensible microscopical nor mechanical change in the character of the secretion. This, then, being the physiological condition — one of activity, as we see — our golden interval of passive quietness is gone, and we must attack the full secretion at more or less of a disadvantage. With the removal of the child, the milk ducts naturally become filled to repletion, and frequently often to a dangerous point of distension; for its withdrawal, under natural laws, is brought about, as a rule, by the suction force produced by the mouth of the infant, for whose nourishment the secretion serves; that is, by atmospheric pressure. The smooth muscular fibres which surround the whole gland probably assist. A portion of the muscles further subserve the purpose of the erection of the nipple, which subject has as yet been but meagrely investigated, and which ceases to occur, according to Eckard, after section of the mammary cerebro-spinal nerves.

The secretion of milk, then, forming freely and more or less constantly, distending gradually the glandular structure, especially the vesicles of the acini, with their ducts, and not finding exit from the numerous little lactiferous ducts coursing through the nipple, causing discomfort and eventually pain, with possibly tender enlargement of the neighboring axillary lymphatics, accompanied with more or less pyrexial movement, as well as reflex nervous phenomena, brings before us a picture at once, if not alarming, at least highly disagreeable and unfortunate and demands our earliest and best attention. To relieve the condition thus set forth requires several steps in regular succession.

1. To disengorge the distended and weighty glands of their secretion by means of (1) artificial suction, as with the breast

pump, or (2) by delicate manipulation with the hand, as rubbing and compressing from the base toward the nipple in the direction of the lactiferous ducts, the breast being previously anointed with either vaseline or sweet oil. After removal of the larger portion of the retained secretion — and this should be pretty complete — as shown by their soft and pliable condition, it is recommended

2. To apply thoroughly over the whole gland officinal belladonna ointment, the nipples being included, after which cover the gland with a circular piece of belladonna plaster, an aperture having been previously made in the centre for the admission of the nipple, through which it is allowed to protrude.

3. To strap the breasts up precisely in the same manner as above recommended, with the exception that the nipple be allowed to protrude through a hole cut in the centre of the plaster. After the glands are held in perfect position,

4. To introduce belladonna in form of solid extract, gr. ¼ t. i. d., or in form of the officinal tincture, m. x to xii t. i. d., or, if preferred, to give iodide of potassium in five-grain doses three times daily, with ergotine, gr. i, in pill form.

5. To recommend almost total abstinence from drinking any forms of fluid, and to eat very sparingly of the most digestible and assimilable forms of food.

6. To move the bowels freely by laxatives and enemata.

7. Should there be, as frequently is the case in conditions here cited, further secretion sufficient to produce distension and "knotting" of the ducts, with tenderness, tincture of iodine painted in a strip about one inch broad so as to completely encircle the breast at its base will be found to be effective and energetic in ameliorating these disagreeable symptoms.

8. It will be understood that the continued application of the breast pump may be required, also, at intervals of from six to twelve or twenty-four hours; greater frequency will only tend to perpetuate the flow. Usually it may be altogether discarded.

9. As in the previous condition alluded to, the strappings must *always* be kept tense, and the pressure upon the glands equalized over the largest portion of their anterior aspect.

10. After from ten days to two weeks, according to the circumstrnces of the case under observation, the dressings may be wholly removed. A full diet, combined possibly with a tonic, if need be, might then be enjoined.

A third and frequently most distressing factor which calls for our interference is the condition termed "galactorrhœa," especially that form which is designated "mammary diabetes." As you are no doubt aware, galactorrhœa occurs in two forms. In the second variety the increase in the bulk of the secretion is owing to a preponderance of its aqueous ingredients. If the excessive secretion, as coming under this last category, continue for any length of time, great and rapid emaciation will supervene. Along with great feebleness, there unfortunately exists sometimes, in these cases, complete anorexia, gastric and intestinal disorders — in fact, the whole chylopoietic system seems utterly and irrevocably disordered; and to this condition "mammary diabetes" is applied. In such cases ordinary remedies may prove of little avail, and after a few weeks it becomes only too evident that lactation must entirely cease, the child must be weaned and measures taken to permanently arrest the secretion; and the method best adapted to such cases is, in short:

1. To empty the breasts as has previously been mentioned.

2. To strap, after covering with belladonna plaster, the breasts in the usual manner.

3. To administer belladonna internally.

4. To employ such dietetic measures as are most likely to repair the sadly degenerated health.

5. To use, as soon as expedient, tonic ferruginous medication.

The important function centered within the mammary glands is frequently liable, from ulterior circumstances, if we may so express ourselves, to suffer from disturbing influences. The most familiar is mastitis, or inflammation, brought about more or less indirectly through the influence of cold, constitutional idiosyncrasies, traumatism or various diseases of the nipples. Indeed, Lusk would have us believe, in his work on midwifery, that cold, blows, caking from milk retention, play but "a subordinate rôle in the etiology of the affection," and that they are all, with the exception of lesion of the nipple, "suppositions of extreme convenience, as relieving the physician from responsibility for their occurrence." This author believes that disordered nipples are the "starting point from which the inflammation travels to the glands, either passing to the deep-seated tissues by the lymphatics or following the track of the lactiferous ducts to the glandular acini." But it is not within the domain of this discussion to dwell upon this interesting pathological

subject of mastitis or its causes; therefore let us dismiss it without further ceremony, remembering simply this fact, that diseases of the nipple certainly play a most formidable part in the production of inflammatory glandular processes, and those measures which may be considered prophylactic of any inflammatory outbreak are what must now attract our attention.

In view, then, of the fact referred to — that is, the liability of various forms of disease of the nipples to extend to the underlying glandular elements, producing inflammation, with its possible serious consequences — it would seem to the writer that their treatment should be a matter of no little interest to every careful and judicious medical man. Indeed, many of the most apparently trivial affections afflicting these delicate mammary appendages, albeit so common and withal so troublesome and painful, are frequently of peculiar importance as reflecting upon the welfare and general health of the patient. Erythema, excoriation and fissure, besides ulcerations and hyperæsthetic conditions about the areola, may never show the light of their unwelcome countenances by a little judicious care exercised early, say a few weeks prior to the expected confinement. Especially is this prophylactic care to be used in the case of women who lead lives of luxury and whose habits are sedentary, and particularly is it important in that class of cases in which the strumous taint is manifest. It has been the custom of the writer in such cases as mentioned to recommend, four weeks before expected confinement, applications to the nipples nightly (just before retiring is as appropriate a time as any) of some one of the following embrocations: Alcohol and water, equal parts, or brandy and water, two-thirds of the former to one of the latter, a weak infusion of green tea, or a weak solution made of glycerite of tannin ʒ i, to rose water ℥ iij. All pressure from tight-fitting clothing or cumbersome, illy-adapted corsets should be early removed, as the friction excited by their presence is an incentive to the realization of just such primary conditions. Should there be present, either by pressure or through congenital malformation, a flattened depressed or even inverted condition of a nipple, the early use of the breast pump is indicated, and its use should be constantly persisted in, for it is all important that a well-formed nipple be present for the purpose of nursing the young infant, as well as to help insure immunity from parturient troubles. If, after repeated trials, the breast pump fails, we

have witnesseed excellent results from the use of dry cups placed directly over the nipple, the air being exhausted after the usual method. As a last resort, and one which, when suggested, we must confess is not always agreeable to our patient, is the use of a strong, clean and dextrous *sucking pup.* Twice have we witnessed, with surpassing success, the adaptation of such means to ends like these. In this connection we fain would quote an experience with an inverted nipple occurring in the left breast of a lady who, about two years previous, after the birth of her first child, had suffered, as a result of the malformation, from a severe and protracted mastitis, and who at the time of our being consulted was again pregnant, and feared that a like experience would be her lot. It was found on more careful inquiry that, though mastitis had occurred in her left breast, the right continued to secrete freely for nearly six months, and this brave woman had continued nursing her infant for that period by this single gland, the diseased organ being prematurely disabled and useless. Indeed, had no mastitis occurred originally, in all probability the secretion of milk would have continued, to a greater or less extent, to drain away, thereby adding great discomfort to the patient, not to speak of the constant liability to the danger of an inflammatory process springing up within the gland at a more remote period. After six months' time, however, the secretion coming from the sound breast began to diminish, and in a few weeks it became imperative to wean the infant, which happily did well. From such a history, as related, and after repeated trials by the various methods to draw out the inverted nipple, all of which failed, it was deemed most expedient, after her parturition, to immediately strap up the left breast *completely.* Accordingly, on the day after delivery, the breast being elevated and held as high as possible by the hand of an assistant (the nurse), a broad strip of adhesive plaster, about two and a half inches in width and two and a half feet long, was made fast to the skin about four or five inches below and to the left of the breast, and then carried over the gland, adhering firmly to its whole anterior surface, finally being brought over the left shoulder and stuck fast to the skin below the left inferior scapular angle. Tincture of iodine was then painted about the base of the gland at its exposed portions. On the third day there was a slight elevation of temperature, with a quickened pulse, and milk was seen to flow from the nipple of the sound breast; there was also

slight tumefaction of the strapped gland, but no tenderness. The infant was put to the right breast, and emptied it every two and a half hours. On the fourth day some tenderness and tumefaction was found in the confined gland, which was painted a second time with tincture of iodine. Milk was now flowing very freely from the right nipple, and more than enough to supply the child. All sensitiveness and hard swelling disappeared in a few days, enabling us to remove dressing entirely after two weeks, there being little or no secretion of milk found, while the right breast had nearly *double* its normal quantity, and nourished the infant solely until the proper time for its weaning.

In a similar manner has this same lady been treated twice since the date of the birth of the child reported, and in each instance with like excellent results, the secretion in the confined breast always being promptly arrested, or never, indeed, being allowed to form, while the sound breast performed its function with double its presumably normal vigor, nourishing the infants always until the time for their natural weaning.

Oftentimes, before lactation completely sets in, the areola of either one or both breasts becomes morbidly sensitive to the touch, and especially painful during the application of the child to the nipple. The nipple itself may likewise be involved in this nidus, which is one more or less erythematous in character, and is somewhat more frequently found in primiparæ. The condition generally is a sequence to untidiness and lack of attention to the care of the breasts during the pregnant state. An application of Goulard's extract, an ounce in half a pint of water, applied with a soft bit of lint between the times of nursing, the breasts being thoroughly cleansed whenever the infant is allowed to suckle, is productive, generally, of permanent benefit. If allowed to continue, much more perplexing pathological conditions are apt to develop, as excoriation, fissures and ulcerations, all much more troublesome to manage. The epithelium becoming macerated and exfoliated by presence of the early secretion constantly saturating it, combined with the mechanical friction from the sucking mouth of the young infant, eventuate in vesiculation and erosions, which, should no new epithelial growth cover, are destined to be converted frequently into more or less deep ulcerations. Should numerous vesicles coalesce, the papillæ of the nipple enlarge, and, being bared of epithelium, a "raspberry-like" appearance results.

For simple excoriation, where rupture of the vesicles has not even taken place, probably there is nothing better than the application of Goulard's extract. If ulceration, though, be present, with a high state of inflammation, a delicate poultice of bread and milk is indicated, after which, should all the acute symptoms subside, nothing is better, we think, than touching the ulcerated points with the solid pencil of nitrate of silver. The pain resulting, though severe at first, quickly subsides, and the diseased parts are afterward protected by a coating of albuminate of silver. In these cases less frequent nursing is also advised, as is the wearing of a suitable nipple shield either of glass or hard rubber.

Fissured nipples, the most excrutiatingly painful and usually the most rebellious to treatment of all forms of disease of these organs, will, we think, quickly give way before some such course as the following, prescribed by Prof. Lusk in his work on the "Science and Art of Midwifery": "As regards the treatment, it is well to bear in mind that, with cleanliness and the removal of inviting matters from the wounded surface, the worst cases of sore nipples will get well in from twenty-four to forty-eight hours, provided lactation is suspended. The object of the treatment, therefore, is to cure the lesion without interfering with the nursing of the child. This is comparatively easy when but one nipple is affected, as the child need only be applied to the sound side. In that case, however, the excessive tension which results from the suspension of lactation should be relieved by stroking the breast from the base toward the apex with the hands or by getting the nurse to draw the milk with her mouth, or by means of a breast pump with a wide trumpet-shaped extremity. The healing process can at the same time be promoted by lead lotions, by a solution of tannin or by some astringent ointments. My rule is to keep upon the nipple a rag wet with Goulard's extract, during the patient's waking hours, substituting therefor a carbolized ointment during the hours of sleep, when the drying of a lotion would cause the rag to adhere to the raw surface. If the child be troubled with 'sprue,' special attention must be taken to cure the mouth, and the development of the oïdium albicans upon the nipple should be prevented by frequent washings with solution of boracic acid or the sulphate of sodium. Cracks are much more rebellious of treatment than simple erosions. If of any extent, the nipple should be drawn to one side so as to expose the fissure, which should be touched with the

point of the mitigated stick of nitrate of silver. As the effect of the latter is intended to be local, it should be applied dry, the lymph furnished by the denuded surface affording the requisite moisture. I mention this trivial detail, as in hospital practice I have sometimes seen the entire nipple robbed of its epithelium, owing to the mistake made by the house physician of first dipping the pencil in water and then allowing the strong solution to diffuse itself over the sensitive surface. Compound tincture of benzoin, strongly recommended by Prof. Fordyce Barker, makes a good stimulating application to cracks of the nipple. Though somewhat painful when used for the first time, it is afterward easily tolerated. If both nipples are simultaneously affected, lactation cannot, of course, be entirely interrupted without drying up the milk, but the intervals between the acts of nursing should be lengthened as much as the comfort of the mother will permit. If the milk will not come without tugging, the flow should be furthered, before applying the child, by stroking the breasts." This author does not believe in the utility of the nipple shield, but thinks that without them a cure may be expected by perseverance in the use of the methods suggested. He believes that stopping nursing altogether only becomes a necessity "when the nipples are hopelessly misshapen, or when mastitis threatens." Should it become impossible in any case to subdue the irritation arising from these morbid conditions, it then is imperative to remove the child permanently from the breast, and to treat these organs as previously laid down for arresting the lacteal secretion.

Neurosal affections of these organs need only a passing notice, as they are seldom or never productive of any great harm, and usually are quickly amenable to appropriate treatment. They occur generally in primiparæ, and in all probability are the result of hyperæsthetic conditions arising from mental excitement. The novelty of the situation likely has also much to do with this, combined with the rude and ill-placing and holding of the child during the act of nursing, due to lack of experience. Any of the various sedatives to the nervous system are indicated in these conditions, preferably, we think, the bromides, especially ammonium in three-grain doses repeated every two hours. Locally, fl. ext. hammamelis and very hot water, equal parts, applied frequently with soft rags, is about all that is found necessary; also, the woman should be instructed as to how she should hold her infant while nursing.

ABSTRACTA.

TUBERCLE BACILLUS.—E. O. Shakespeare, M.D., Philadelphia, criticises Dr. Formad's papers on the bacillus tuberculosis. He denies that Koch's policy is to hinder others from repeating his now famous experiments on tuberculosis. He had been in Berlin to obtain ocular demonstration of Koch's methods, and every facility for his purpose had been courteously tendered to him in the Imperial Health Office.

Dr. Formad's statement that Koch had modified his views of the characteristics of the tubercle bacillus is incredible, because of confirmation of Koch's original claim from all parts of the globe, and because Dr. Formad himself differentiates this organism to his pupils by the self-same characteristic coloring and morphology.

Dr. Formad opposes Koch's theory of tuberculosis by the claim that there is no necessity for the action of a specific agent in the production of tuberculosis; that scrofulous animals have an anatomical peculiarity — that is, a narrowing of connective tissue lymph spaces; that the inflammatory process in such animals, from any exciting cause, is necessarily tubercular. To support this view, Dr. Formad exhibited sections showing cellular hyperplasia of the connective tissue, but no section capable of demonstrating lymph spaces — not one silver nor gold preparation.

Even admitting Dr. Formad's *hypothesis*, it only explains *predisposition*; the *exciting cause* of tuberculosis is a different question. The claim of Koch is not that the tubercle bacillus excites tuberculosis under any and all circumstances, but that a suitable soil and favorable conditions are also essential.

Dr. Shakespeare asserts, as established, that the tubercle bacillus, under favorable conditions, produces genuine tuberculosis. He does not admit that it has been demonstrated that no other agent may produce the disease, nor that any other agent can; the tubercle bacillus is of incomparably greater virulence in exciting tuberculosis than any other known agent. The proof is strong that tuberculosis is, under favorable conditions, infectious — conveyed from person to person — and that the infecting agent is the tubercle bacillus. The tubercle bacillus, when present, is an infallible sign of the presence of the tuberculous

process, but its absence, unless after repeated searches by competent observers, does not warrant a negative conclusion. From its reported presence earlier than physical signs could indicate tuberculosis, its detection may become of inestimable value.—*The Polyclinic*, June 15.

DR. FORMAD, in reply, says: I am erroneously quoted to have made the declaration *that Koch had so far modified his views that he now admitted that neither the form, size and aspects of the tubercle bacillus, nor its want of individual motion, nor its peculiar behavior toward staining fluids, distinguished it from many other bacilli.*

This is not true. What I ever said or published on this particular point (in regard to Koch's view) was this:

Dr. Koch kindly demonstrated to me a number of specimens of bacilli, and in particular the appearance of these bacteria, exhibiting under low amplification the peculiar S-like figure in the growth in masses. *Koch seems now to lay more stress* upon this low power appearance and upon the pathogenetic properties of the bacillus tuberculosis, as a distinguishing feature from other bacilli, than upon the color test. During the conversation he admitted that some other bacilli may also yield the same micro-chemical reaction as the tubercle bacilli, but insisted that the latter bacilli cannot be stained brown. The failure of the tubercle bacilli to take the brown stain, he said, was the reason that they cannot be well photographed (blue and red-stained objects not being suitable for photographing).—*Md. Med. Jour.*, July 5.

JEQUIRITY AND ITS BACILLUS.—Sattler, of Erlangen, by request of DeWecker, of Paris, made certain experiments, and claimed that the peculiar inflammation developed by jequirity infusion was due to the activity of a certain form of bacteria. Recently (*Fortschritte der Medicin*) Neisser, of Breslau, and C. J. Salomonsen and Dirkinck-Homfeld, in Copenhagen, have arrived at results contradictory to the claims of Sattler, viz.: (1) An infusion rigidly free from bacteria exhibits the same activity as that containing bacteria, and remains active as long as kept free from bacteria, but loses strength after their development. (2) The bacilli of pure culture, introduced into the conjunctiva in large quantity, were powerless. (3) The secretions, diphtheritic membrane and pus from jequiritized eyes

never produced inflammatory action when applied to a healthy eye, and (4) never exhibited the characteristic jequirity bacillus, although micrococci were found. (5) The peculiar action is due to a substance in the bean, not yet isolated — an amorphous ferment. (6) This principle is insoluble in alcohol, chloroform, benzine or ether, slightly soluble in water; very soluble in glycerine; is destroyed if exposed for an hour to a temperature of 65° to 70° C. (149–158° F.). (7) The quantity contained in .00001 gramme of jequirity seed develops conjunctivitis; one-half as much has no effect. (8) The poison hypodermatically in mice or frogs quickly kills.— *Weekly Medical Review*, April 5.

JEQUIRITY dialysate (free from bacteria), diluted ordinarily with five parts of water, acts satisfactorily in New York hospitals.—*Phila. Med. Times.*

VALUE OF SINGLE SYMPTOMS IN DIAGNOSIS OF DISEASES OF CHILDREN.—In the *American Journal of Obstetrics*, Vol. XVII., No. 77, appears a valuable and interesting abstract of an article by Politzer, of Vienna, published in the *Jahrbuch*, XXI. B., 1u. 2 H. The author of the abstract, Dr. J. Fewsmith, Jr., considers that opinions coming from a man like Prof. Politzer, who has enjoyed an unusually extensive practice of more than forty years, and who is at the head of the institute for children in Vienna, should be entitled to more than a mere passing consideration. In his article Politzer arranges certain marked and characteristic symptoms of disease together in such a manner that a diagnosis can readily be arrived at from these alone; at all events they lead to proper interpretations almost immediately.

The author considers first a few symptoms which make his position especially clear. They are:

1. *The symptom of a strongly marked nasal or palate sound in the child's cry.* This symptom, at first glance, may not seem in its individuality to mean much, but in many cases it may lead us to early diagnosis of retropharyngeal abscess. This disease is not rare between five and six years, but is very often overlooked, especially in the first few days of its existence. Other symptoms of it may all be occasioned by other diseases, and inspection of the throat may not discover it. This nasal tone should *always* lead us to palpate with the finger in the throat — the only sure way to discover a retropharyngeal abscess. The

cry is not pathognomonic, but Politzer narrates some interesting cases where he made the diagnosis from it.

2. *A long-drawn, ten to fifteen times lengthened, loud-sounding expiration, with normal inspiration and no dyspnœa.* This symptom, even when alone, is sufficient for the diagnosis of *chorea major*. Cases are detailed where for days this was the only symptom of a commencing attack, and some in which it was almost the only symptom of the whole disease. It takes place without any dyspnœa, with perfectly quiet movements of the diaphragm, and no effort of the accessory muscles.

3. *A high thoracic, continually sighing inspiration.* This is one of the most important "single" symptoms mentioned, and one to which certainly not enough attention has been paid. It shows the *commencement of cardiac weakness, cardiac paralysis*, and in certain cases fatty degeneration of the heart. It is not a stenotic respiration (as in croup, etc.), shown by forcible action of the diaphragm principally, but high thoracic, the upper part of the thorax doing the work, and instead of the stenotic sound we have the sighing or groaning. Long before other symptoms of cardiac weakness occur, such as cyanosis, coldness of extremities, etc., this sudden change in the respiration may be a guide-post to what is coming.

4. *Strongly marked diaphragmatic expiration, accompanied by a fine, high whistling sound.* This symptom is almost the opposite of the last. It points to *asthma bronchialis*. The author guards himself here. The respiration of croup or even of capillary bronchitis may greatly resemble this, but the point is that when we hear it we should always incline to the diagnosis of asthma, and, if other symptoms bear us out, we shall not have to give so bad a prognosis as otherwise.

5. *Pause between the end of expiration and the beginning of inspiration.* This is a valuable single symptom to differentiate between *catarrhal laryngitis* with submucous œdema and catarrhal spastic stenosis and *true croup*. As long as the pause is clear and distinct the croup may be excluded. The younger the children the surer is this sign. But the ear must be placed close to the child's mouth to be sure that there is an appreciable pause. Cases are given in which the author advised against tracheotomy in apparently fatal issues, and yet the patients recovered, and this, too, without the expulsion of any membrane.

6. A class of single symptoms which are of worth in the diagnosis of brain diseases:

(1) *Sleepiness, lasting some time and occurring without fever or other apparent disturbance to account for it.* The first question is, Has the child fever? If it has, this is enough to account for the sleepiness, though even here we must enquire if the latter is not out of proportion to the former, and, if so, we must look out for cerebral trouble. But when we find *sleepiness* for twenty-four to thirty-six hours, *absolutely without fever*, we may regard it as pathognomonic initial symptom of idiopathic cerebral disease. In such a case we think at once of basilar meningitis. The latter very frequently occurs in the course of other diseases, and there is no single symptom on which its commencement may be so surely predicted as this feverless sleepiness — not even the vomiting, the long-continued headache, the slow irregular pulse. Any of these may occur alone, and yet disappear. Of course, if all occur together, the case is clear. But the sleepiness, even alone, is sufficient for a diagnosis. There are only two other things which could cause it — narcotics or uræmia. In some rare cases the sleepiness might point to an acute hyperæmia instead of a meningitis, but this is so rare that its existence is doubtful.

(2) *A prominent, firm fontanelle, not disappearing on pressure.* This means increase of the quantity of contents of the cranium, *exudation* of some sort. It cannot be caused by fullness of the vessels alone. In some acute hyperæmias there is a prominence of the fontanelle, but it is not firm and resisting as here described. This symptom may be valuable in the following cases:

(*a*) Its *absence* in the delirium, sopor and convulsions of violent fever will show us that the causes of the symptoms are extra-cranial.

(*b*) In intermittents and fevers with high temperatures we can determine by its presence or absence the existence or non-existence of cerebral complication.

(*c*) In pneumonia, when we have sopor, convulsions, and even contraction of the neck muscles, a soft fontanelle will show us that there is still no exudation, and in a few days all these symptoms pass away.

And so in the beginning and course of typhoid, in nephritis and other diseases, the condition of the fontanelle is a valuable guide. When we find this firm, resisting and prominent, we may know that we have an autonomous cerebral disease, with

exudation. When the fontanelle is soft, whatever the symptoms, we may exclude such trouble. When the fontanelle, in addition to being enormously distended, is also entirely free from pulsation, it can mean but one thing — infantile apoplexy, inter-meningeal hemorrhage. When deeply sunken, it points to loss of blood or other nutritive juices, as in cholera, enteritis, etc. When the eyes as well as the fontanelle are deeply sunken, the diagnosis of loss of fluid is evident at the first glance.

(3) Very slow movement of the head and a staring look in the wide-open eyes is one of the early symptoms of basilar meningitis, though not so valuable as the sleepiness already spoken of.

7. A series of single symptoms depending on the *variety of crying:*

(*a*) *A sharp, shrill cry, accompanied by an expression of fright or great anxiety*, and occurring typically about an hour after the child has fallen asleep, is a single symptom in the strictest sense of the word. It is, in fact, the only symptom of the "Alp" night terrors, the sudden awakening from bad dreams.

(*b*) *Periodical crying, lasting from five to ten minutes*, sometimes occurring day and night, but oftener only at night, should always make us think of a *spasm of the bladder or painful urination.*

(*c*) *Violent crying at stool*, with fear of the act and avoidance of it, points to fissure ani, generally accompanying constipation.

(*d*) *A violent cry, full of pain and almost continuous*, with a throwing about of the head on the pillow and grasping it with the hands, means *earache or otitis.*

(*e*) Crying continued for weeks, increased on touch of the extremities, accompanied by fever and incessant sweating, may be a symptom of acute general rachitis.

Some important single symptoms frequently overlooked:

(*a*) The peculiar physiognomy of hereditary syphilitic children, never to be forgotten.

(*b*) Falling together and immobility of the alæ nasi during the nasal inspiratory act. This indicates *tonsillar hypertrophy*, and is usually accompanied by snoring at night and a narrowness of the chest.

(*c*) Weakness or immobility of a child after a comparatively slight or short sickness. This is an important finger-post to make us watch for spinal paralysis. In this connection we must

at the same time examine the child in regard to the next two points, viz.:

(*d*) Slight deafness, especially when it follows some apparently trivial disease, is apt to point to some trouble at the base of the brain. In young children deaf-dumbness may thus commence.

(*e*) Depression of psychical activity. Overlooking this we may pass the stage of an idiotismus acquisitus and our best chance for treating it. It is easy, in noting the condition of a child after a sickness, to observe these three points above mentioned, and we should make it a rule to do so in every case.

(*f*) Abnormally delayed ossification of the cranial bones. It is the earliest *sign of rachitis*, and at this stage the disease yields well to treatment.

(*g*) An anxious, stiff attitude in walking, sitting, rising or bending, and, in children who are unable to walk, an expression of pain when picked up or laid down, is sufficient almost for the diagnosis of a commencing spondylitis.

(*h*) *Vomiting* of all kinds of food, continuing several weeks in children with closed crania, but with large cranial measurements, the absence of fever excluding any idiopathic disease, and the absence of pain excluding a cerebral tumor, we may diagnosticate chronic hydrocephalus with an acute onset.

(*i*) An attack of eclampsia should always make us consider and determine by other symptoms if it is not the first sign of epilepsy. F. T., JR.

ELASTIC PRESSURE in inflammations of the mammary gland: Perforate the centre of a piece of dentists' rubber coffer-dam about eight inches square; tie tapes to the corners; pass the nipple through the perforation; tie the tapes around the body and shoulders to press the gland equally. This in no way interferes with the breast pump nor with embrocations. This appliance on a secreting, but not inflamed, gland stops lacteal secretion in a few days. In a suppurating gland, after evacuating pus, this elastic pressure greatly relieves. Incipient inflammation, in no case, need to go on to suppuration.—*Med. and Surg. Reporter.*

LACTOPEPTINE has given satisfaction for a number of years in the treatment of digestive disturbances of the little ones, and also of older people. The bowel troubles of children which occur at this season of the year are agreeably helped by a few timely doses of this pleasant medicine.

THE MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

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VOL. V. JULY, 1884. No. 7.

THE ETHICAL CRITERION

Proposed by Dr. Roosa, to wit, "physician and gentleman," is not regarded by the whole profession as sufficient, although no one wishes to say that his professional neighbor must be something more than a physician and something more than a gentleman in order to be his professional brother and social equal. The above criterion, of new-code origin, requires a universally received decision of what constitutes a true physician; and this deficiency is supplied by Dr. Austin Flint, Sr., who, being the late president of the American Medical Association, may therefore be regarded as one whose utterances have the approval of the old-code men. In the president's address, Washington, May 6, 1884, he said "the term 'irregular practitioner' should not be interpreted to mean one who might entertain exclusive ideas regarding certain matters in medicine, but rather one who adopted a sectarian name, as 'Homœopath,' 'Eclectic,' etc. He would submit as a recommendation that the association adopt resolutions embodying a more precise specification than the code furnished as to the grounds for consultations with irregular practitioners, and he would approve of its being stated that those who adopted a sectarian name should be excluded from fellowship with the regular profession."—[Extracted from report in the *New York Medical Journal.*]

Standing side by side with Austin Flint, Sr., M.D., ought we not, in honor, to shake hands with those of the "enemy" who have torn down their flag, who have blotted out their old title, "Homœopathic," who have done all that Dr. Flint has asked?

A gentleman in Troy has doubted the propriety of the publication of minutes of the Medical Society of Northern New York in THE MEDICAL ANNALS for May, 1884; and hence these remarks.

Can the staunchest old-code adherent consistently raise his voice against such publication, or even against the participation of "regular physicians" in the proceedings of that society, since the society has obliterated from its head the term "Homœopathic," and thus raised itself to an equal ethical footing, not merely with new-code physicians of the "physician and gentleman" stripe, but with regular, loyal old-codists like Dr. Flint?

Dr. Flint's criterion is endorsed, also, by the *New York Medical Times*, which has for some time dropped from its title the sectarian name "Homœopathic," and in the June number, under the caption, "A Name; What Is It?" commends that step to individuals thus: "The question is an important one to the public and to scientific men. In using a name which is sectarian and represents one idea, we must not be surprised if the great public, more especially the law-making portion of it, take us at our word, a word which we blazon upon our banners and place at the head of all our society organizations. . . The new school [Homœopathic], in nineteen-twentieths of its members, are now and have always been non-sectarian in practice, looking upon the dual action of drugs as only a part of the various principles included in the art of medicine. . . Honesty and good taste alike point to a discarding of sectarian names."

When parties conform to the standard required by an old-code champion, we have no apology left for spurning them; but, as a "physician and gentleman," we of necessity bow a recognition.

L. H.

THE ALBANY MEDICAL COLLEGE.

We reprint the following from the *New York Medical Journal* of July 12, 1884, Dr. Frank P. Foster, editor:

Among many recent indications of the progressive spirit which actuates the governing body of the Albany Medical College, the graduates of which occupy with credit many positions of honor in the profession throughout the country, some of the most striking are to be found in the report of the proceedings of the eleventh annual meeting of the Alumni Association, a copy of which has lately reached us. The pamphlet gives abundant evidence of lofty purposes and substantial achievemants on the part of the college and on the part of the Alumni Association. The most noteworthy,

perhaps, is the fact that the association has so soon been enabled to follow the example of a like association connected with the College of Physicians and Surgeons in this city, and provide for an annual course of alumni lectures. The first course will be given by an alumnus of the Albany Medical College, Professor William H. Thomson, of the Medical Department of the University of the City of New York. The lectures will be delivered next March, the subject being "The Germ Theory of Disease." We are glad to learn that the expense of the first course has already been provided for, and we feel confident that the committee will encounter no serious difficulty in securing contributions ample to make like provision for succeeding courses.

There was another and an exceptional aspect to this meeting of the Alumni Association, and one which, however the unthinking may be inclined to dismiss it as being of a sentimental character, seems to us of more hopeful augury for the college than any mere material prosperity, for it argues a heartiness and an *entente* among all connected with the institution more potent than any consideration of policy or enthusiasm, as well as a status of the profession in Albany upon which we may all look with satisfaction. We refer to the tinge of sorrow cast over the whole proceedings by the loss that had been sustained by the faculty and the association during the year in the death of the president of the latter, the late Dr. Mosher. It is not alone in the formal eulogies spoken by Dr. Murray, Mr. McKelway and Dr. Ward that the deep feeling of the meeting is to be perceived; it stands out unmistakably in the brief remarks of welcome made by Professor Perkins in behalf of the faculty. Mr. McKelway's address, coming from a man who is not only not connected with the college, but is not a member of the profession of medicine, was the particular feature to which we have referred as showing an enviable status of the profession with the community in Albany. To appreciate its full significance in this regard, we should remember that but a month had elapsed since the same gentleman paid a most touching tribute to Dr. Mosher, and that without having been set down for any such part, at the annual dinner of the Medical Society of State of New York; which fact, if any token were needed, goes to show the heartiness that moved him, and incidentally the feelings of a representative layman toward the medical profession of Albany. From all points of view, therefore, the position of the Albany Medical College is one that calls for praise and congratulation.

QUARTERLY EPITOME OF AMERICAN MEDICINE AND SURGERY.

NEW YORK, 123 East 25th Street,
June 16, 1884.

TO THE MEDICAL ANNALS:

Messrs. Editors and Publishers—Please accept my sincere thanks for your highly complimentary notice of the new editor of the *Quarterly Epitome*. I am happy to say that contributions to THE ANNALS have fouud their way to the pages of the *Epitome* for June.

Yours sincerely,

WESLEY M. CARPENTER.

The following named original contributions to THE MEDICAL ANNALS are reprinted in the *Quarterly Epitome* for June: "Delirium Tremens," by Henry Hun, M.D., Albany; "Delirium Tremens," by Jno. Ben. Stonehouse, M.D., Albany; "Contagious Ophthalmia," by G. S. Munson, M.D., Albany. The case of "Infantile Menstruation" reported by a A. Van Derveer, M.D., of Albany, for the *American Journal of Obstetrics*, also appears in this number of the *Epitome*, and has been copied in the *American Practitioner*, Louisville, Ky.

——NITRITE OF AMYL IN OPIUM POISONING was successfully used by Dr. W. L. Johnson, Giddings, Tex. (*Texas Courier-Record*, Fort Worth, May, 1884). Dr. Johnson's inquiry if nitrite of amyl has been similarly employed by others, is answered by reference to THE MEDICAL ANNALS for May, 1882, which contains an article giving both clinical experience and original experimental work with nitrite of amyl in opium poisoning, read before the Albany County Society by Dr. Jno. Ben. Stonehouse, of Albany, N. Y. L. H.

——HIGH POTENCY HOMŒOPATHY.—We cull the following, by Dr. H. M. PAINE, of Albany, from the *New York Medical Times:*

Dynamic [high potency] *practice is an outrage on well known philosophical principles, an insult to common sense, and an offense to common honesty.* The results of scientific research show that chemistry is unable to furnish proof of the material presence of a drug beyond the *third* potency; the spectroscope none beyond the *fifth;* the microscope none beyond the *seventh;* and and the theory of molecular magnitudes (mathematical demonstration) none beyond the *eleventh.*

MEDICAL NEWS.

THE ALBANY HOSPITAL AMBULANCE

Was delivered in Albany on Friday, July 11. The wagon-box is lettered "Ambulance" on each side, in gilt on a maroon background; the words "Albany Hospital" in smaller letters are on each side of the driver's seat; the dashboard reads "No. 1," the end board, "Albany Hospital."

The ambulance is covered over the top with heavy black morocco. In the interior, on the floor, lies a soft morocco-

covered stretcher with cushioned pillow and handles, and there are loops for pole stretchers inside. A seat at the back of the wagon is for the surgeon; brass loops on the sides of the top framework are handy to hold on by. Under the driver's seat in front is a receptacle for instruments, medicines, etc. The word "Ambulance" is on the front of the cover over the driver's head. A twelve-inch gong is behind the dash-board. Two elegant gold-mounted coach lamps are on the outside, and the surgeon's lamp, a green light will illuminate the interior.

The ambulance is now in the rooms of the "Protectives," but will be kept in Charles H. White's livery stable, No. 117 State street, east of Eagle street, subject to call by telephone or otherwise.

It is owned by the Albany Hospital, weighs 1,400 pounds, and was made by M. Gurley, No. 1553 Broadway, New York city. It may be run with a single horse or with a team.

Mrs. Walter F. Hurcomb gave her check for five hundred dollars for the construction of this beautiful and useful vehicle. The balance required for the complete outfit is made up by the governors of the Albany Hospital.

THE S. D. GROSS PROFESSORSHIP.

The Alumni Association of Jefferson Medical College has inaugurated a movement to secure, in some medical school, the endowment of a memorial professorship, to be designated "The S. D. Gross Professorship of Pathological Anatomy."

Contributions may be sent to Dr. R. J. Dunglison, treasurer, lock box 1274, Philadelphia, and will be acknowledged in the columns of the *Medical News*, of Philadelphia.

A large auxiliary committee, embracing men in forty states and territories, and also in Canada, in Great Britain and in continental Europe, unite in this appeal to the profession.

MONTGOMERY COUNTY MEDICAL SOCIETY.

This society elected the following officers at the annual June meeting: President, Dr. William H. Bingham, Fort Plain; vice-president, Dr. J. R. Fairbanks, Amsterdam; secretary, Dr. W. J. Peddie, Fulton; treasurer, Dr. F. G. Buckbee, Fonda. Dr. E. T. Rulison, Amsterdam; Dr. A. V. H. Smyth, Minaville; and Dr. Klock, of St. Johnsville, are appointed essayists.

WARREN COUNTY.

The Medical Society elected the following officers at the annual June meeting: President, Dr. C. S. Barney, Glens Falls, vice-president, Dr. S. H. Slevins, Caldwell; secretary, Dr. W. D. Aldrich, Warrensburg; treasurer, F. L. R. Chapin, Glens Falls. Dr. F. L. R. Chapin was chosen censor in place of Dr. S. J. Murray, who has removed to New York.

WASHINGTON COUNTY.

The Medical Society, at the annual meeting, on the last Tuesday in June (24th), elected the following officers: President, Dr. T. D. Pierce; vice-president, Dr. T. Z. Gibbs; secretary and treasurer, Dr. H. Root. Interesting papers were read by Dr. S. J. Finch and Dr. H. Root.

MEDICAL SOCIETY OF NORTHERN NEW YORK.

The summer meeting (thirty-second year) of the Medical Society of Northern New York will be held at the Town Hall, Saratoga Springs, Wednesday, August 6, 1884.

PERSONALS.

[Send us notices of removals and new offices.]

Ritzmann–Heidrick.—The Fourth Reformed church, on Schuyler street, was the scene last evening of a brilliant wedding. The contracting parties were Dr. Otto Ritzmann [A. M. C., '79], a popular young physician of this city, and Miss Eliza M. N. Heidrick, the accomplished daughter of John Heidrick, the well-known contractor. Dr. and Mrs. Ritzmann left to-day for Saratoga and Lake George. Upon their arrival home they will take up their residence at No. 207 Lancaster street.—*Excerpt from the Albany Journal, June* 26.

Rulison–Ogsbury.—June 25, at the home of the bride's parents, 17 Philip street, Albany, by the Rev. C. H. Tyndall, of Auburn, Luman B. Rulison, M.D. [A. M. C., '84], to Ada M. Ogsbury.

Dr. P. M. Murphy, '63, 66 Jay street, Albany, has been obliged to retire from all business for the present, for the sake of his health. He has for nineteen years kept the popular drug store at 442 Broadway, which he has now disposed of to Mr. Frank P. Aiken, formerly of Greenbush.

Mary DuBois, M.D., of Albany, sailed Wednesday, July 9, on the Aurania, Cunard Line, for Queenstown, in company with the family of Hon. William Barnes. She expects to return to Albany in November, after a tour over the continent.

Dr. F. J. Morrill, '81, 70 Madison avenue, Albany.

Dr. Edwin B. Karner, '83, Stottville, Columbia county, N. Y., not Stockport, as previously given.

Dr. J. D. Van Woert, '83, Canajoharie, N. Y.

Dr. George E. Whipple, '83, Elizabethtown, Essex county, N. Y.

Dr. Robert Babcock, '84, is resident physician in the Albany Hospital.

Dr. F. S. Bloss, '84, 39 Second street, Troy, N. Y., was elected a member of the Medical Society of Northern New York on May 7.

Dr. J. Edwin Bowen, '84, 123 Beaver street, Albany.

Edmund F. Bronk, M.D., a graduate of the Albany Medical College, class of '84, arrived at Antwerp, per steamship Noordland, on the 30th of April, en route to Berlin, to pursue an extended course of medical study.—(*Albany Argus*, May 4.) Address, 22 Lützow Strasse, im zweiten stock, Berlin, Germany.

Dr. C. M. Coe, '84, Lycoming, Oswego county, N. Y.

Dr. C. G. Cooley, '84, Pine Bush, Orange county, N. Y.

Dr. J. D. Craig, '84, Albany post-office, Albany, N. Y.

Dr. W. A. E. Cummings, '84, with Dr. F. S. De Lano, Ticonderoga, N. Y.

Dr. P. C. Curtis, '84, Ballston Centre, N. Y.

Dr. F. M. Devoll, '84, Burtonville, Montgomery county, N. Y.

Dr. Jacob Falk, '84, 60 Westerlo, Albany, N. Y.

Dr. David J. Fitzgerald, '84, has removed from Fort Edward to Glens Falls, N. Y.

Dr. J. A. Flynn, '84, resident physician in St. Peter's Hospital, Albany.

Dr. Fred. R. Greene, '84, Petersburgh, Rensselaer county, N.Y.

Dr. L. A. Harris, '84, Annandale, Dutchess county, N. Y.

Dr. John V. Hennessey, '84, resident physician in St. Peter's Hospital, Albany.

Dr. C. J. Hickey, '84, 144 Jefferson street, Albany.

Dr. G. W. Holding, '84, 272 Clinton avenue, Albany.

Dr. W. G. Hubbard, '84, Plaiston, N. H.

Dr. H. L. Ives, '84, 81 Third street, Troy, N. Y.

Dr. A. A. Jones, '84, Gloversville, N. Y., with Dr. Murray.

Dr. W. C. Kellogg, '84, Onondaga Valley, N. Y.

Dr. J. W. King, '84, Andes, Delaware county, N. Y.

Dr. Elmer E. Lansing, '84, was married to Miss Hattie Arnold, of West Troy, and will be located in Asiout, Egypt. He is expecting to sail in September.

Dr. W. C. Marselius, '84, Phillipsport, Sullivan county, N. Y.

Dr. J. A. McCaughlin, '84, is resident physician in the Alms House, Albany.

Dr. G. H. McTammany, '84, Troy, N. Y.

Dr. William B. Melick, 2d, '84, is resident physician in St. Peter's Hospital, Albany.

Dr. W. Morehouse, '84, Peru, Clinton county, N. Y.

Dr. J. A. Rich, '84, North Easton, Washington county, N. Y.

Dr. L. B. Rulison, '84, Parish, Oswego county, N. Y.

Dr. W. F. Robinson, '84, is at 182 State street, in the office of his preceptor, Dr. J. S. Delavan; was elected member of Medical Society of Northern New York, May 7.

Dr. James Selkirk, '84, who went to Sioux Falls, Dacotah, has now settled in Aurora, Ill.

Dr. M. D. Stevenson, '84, historian, Albany, N. Y.

Dr. G. E. Swift, '84, formerly resident physician in St. Peter's Hospital, is at Hudson, N. Y.

Dr. C. F. Timmerman, '84, Amsterdam, N. Y.

Dr. R. A. Walker, '84, Hartwick, Oswego county, N. Y.

Dr. Bela J. Ward, '84, Troy, N. Y.

Dr. M. A. Wheeler, '84, Albia, Rensselaer county, N. Y.

Dr. Eliphalet Nott Wright, '84, New Boggy Depot, Choctaw Nation, Indian Territory.

Dr. E. Zeh, '84, Gallupville, Schoharie county, N. Y.

THE

MEDICAL ANNALS:

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VOL. V. AUGUST, 1884. No. 8.

SCHOOL HYGIENE.*

BY J. D. FEATHERSTONHAUGH, M.D., A. M. C., '74, COHOES, N. Y.

"The school-master is abroad" in these latter days, and compulsory education has become his besom. The state, in assuming this attitude, has taken upon itself certain other duties which are directly related to this assumption. These duties have been recognized in the inspection of schools, report of which was made by Dr. D. F. Lincoln to a committee of the State Board of Health and included in the second annual report of the Board. The condition of affairs disclosed by this report shows a pressing need of a better adaptation of modern hygienic ideas to school architecture and the details of school management. It is a truism to assert that mental and physical hygiene should not be divorced in the public school system. To enforce the former at the expense of the latter would be a blot upon the state's enlightened policy.

It may seem to some that there are already safeguards enough — that the various school boards, assisted by their local boards of health, are competent to look after all such matters. To such, the report referred to is a sufficient reply; and it may be added that now, as before, the old evils of ill-adapted buildings, bad ventilation, overcrowded rooms and the presence of glaring nuisances upon the premises yet remain monuments of civic conservatism.

*Read before the Medical Society of the County of Albany, February 27, 1884.

I believe that the day will come when the pedagogue who shall crowd into a room which has a vital capacity for forty, double that number of unfortunates, will be looked at as the lineal descendant of the Nabob of Bengal, and when a school-room situated above a cellar devoted to the worship of Cloacina will be regarded as an odorous memento of the Black Hole of Calcutta.

To attain such a lively public sentiment, it will be necessary to have some system of expert inspection by the state, which, upon proper presentation before the local boards, may effect from them the needed reforms; and this, it appears to me, will be, sooner or later, accomplished in the direct line of the state's educational policy.

Let me ask here: Are there any definite principles of hygiene that are strictly applicable to schools, so well settled that even the proverbial doctors will not disagree? The science of hygiene, derived from physiological truths, must of necessity be based upon those vital relations that every individual bears to his environment; and so far as physiology is interpreted correctly, so far will the principles of hygiene be based upon ontological verities.

In the application of the principles of hygiene to schools, while the principles must remain the same as in the ordinary household, the adaptation of certain methods, differing widely from those ordinarily in use, must be required from the altered condition of the problem. That it is a problem involving architectural and engineering skill of an order not common in the villages or towns of the state, or else that the weight of public opinion as represented by the local boards lags behind the advance of sanitary improvement, is evident to the observer. Yet, wherever opinion or interest have been strong enough to enforce sanitary activity, all the difficulties connected with the subject have been satisfactorily met.

The changed conditions between school buildings and ordinary dwellings are mainly the facilities with which an impure atmosphere is generated in the former. The various heads under which this subject may be discussed are as follows: Site and General Plan of Buildings; Drainage and Disposal of Waste; Cellars; Ventilation; and Lighting.

First. Site and general plan of school building. The possibility of the existence of any disturbing element in the neigh-

borhood should be carefully excluded, and the site should be generous enough in size to insure plenty of light and air. The certainty of good drainage, by the natural conformation of the land, should be insisted on. The general plan of the building must be governed by considerations of light and ventilation, and no sacrifice of them should be made for general architectural beauty.

Second. Drainage and disposal of waste products. The drains of school premises should be laid under the plan of some competent expert and all plumbing under his strict supervision. No privies of any kind should be tolerated within the building. At the best they are frequently annoying to the senses and generally a most pestilent source of disease. They should be situated at a moderate distance from the building, should be warmed, ventilated and drained, and should be cared for as similar appliances are within our own houses. No cesspools nor privy vaults should be allowed in connection with them.

Third. Cellars. All cellars and basements must be dry, clean, light and well ventilated. A wet cellar means wet walls; it means that the insensible circulation that takes place between the outer and inner air through the walls is reduced to *nil;* that the walls act as good conductors of heat and non-conductors of the watery vapors exhaled in expiration. The absence of these requisites means that in these cellars lurk all the possibilities for the propagation of zymotic diseases; and when we add that they are the favorite habitat of closets, that have been banished from the more favored regions above, the dangerous potentialities of this region are evident. All halls and passages should be broad, well lighted and ventilated. As the necessity for warmth is not so great as in the rooms, direct ventilation may be made in them by opposite transoms.

Fourth. Ventilation. Ventilation is a change of air that takes place without draughts. In a cold climate such as ours this restriction of meaning is important, as the difference in temperature between the inner and outer atmosphere is often as great as 70° F., and with such a difference the movement of air from without constitutes draught, even when there is no wind stirring outside. Ventilation and heating are inseparable. Natural ventilation, as contradistinguished from the methods by extraction or propulsion, is generally used. Under this system of ventilation the difference in specific gravity of the inner and

outer air will be the source of movement under which ventilation takes place, whatever may be the method of heating.

The requisites that will afford approximately pure air are a certain cubic space for each individual, a sufficient supply of fresh air and the removal of devitalized air. The cubic space allowed should be independent of all theoretical supplies of fresh air. The one can be exactly calculated by the average school commissioner; the other may be approximately estimated by an ingenious expert. If the cubic space is too small, the fresh air to be hourly supplied rises to such a large quantity that practically it is not attained, unless with the production of injurious draughts. The cubic space let me fix at 300 feet per head, and the supply per hour per head at 2,000 feet. Thus, a room whose dimensions are in feet 35x25x14 contains about 12,000 cubic feet of air; with 40 scholars, the cubic feet to each scholar would be about 300, and, with a supply of 2,000 feet of air per head per hour, the whole air of room would be renewed about six times in an hour. If these conditions are fulfilled, it is not likely that the proportion of carbonic acid gas will rise above 0.2 per 1,000. This would give us the ideal room, but the income and outgo of air are, however, so governed by such a variety of causes that it would be well to consider some of them. The most important as the source of exchange is the difference in weight between the atmospheres. As this is greatest at low temperatures, so will the exchanges be.

All air for delivery in a room must be taken from a pure source outside, and its supply should be capable of being regulated. It is best delivered a few feet from the floor, and an upward movement communicated to it at point of delivery is better than a horizontal one. The height of the shaft of exit, its direction, smoothness, size, warmth, the kind of terminal opening and the direction of the wind modify the velocity, and therefore the quantity of the exit current. Ventilating shafts should be straight and smooth internally, and should be valved and cowled externally. They are better when artificially heated, as by a coil of steam pipe or gas jet. As friction is greatest in polygonal forms, the circular shape is the best. Shafts should have corresponding points of origin in different rooms, should each ventilate a single room only, and should terminate at equal heights. The number and the areas of their horizontal planes should be specifically determined by the data of needs in any

given case. It is to be regretted that in many parts of the state the school recess has been omitted. No system of ventilation gives the same results that can be obtained at this time by the perflation through open doors and windows.

Fifth. Lighting. Light should come from one side or rear. Cross lights should be avoided. Windows should go well up to ceiling. The width of rooms should be less than twice the height of windows. Blackboards should not be placed between two windows. The front and rear of city buildings generally afford best opportunities for lighting. They should not, therefore, be taken up for halls or corridors. All walls should be made to reflect light, and not to absorb it.

Much more might be added regarding water supply, the enforcement of vaccination, the exclusion of contagious diseases, and many other things that no doubt suggest themselves to you.

If much of the above belongs more strictly to the domain of the mechanical engineer than to that of the physician, I may plead the impossibility of assigning to each his distinct and inviolate territory.

DISCUSSION.

Dr. L. HALE introduced to the Society

Prof. E. A. CORBIN, of the Albany High School, who, having been invited by the President to take part in the discussion, said: Looking at the subject in its economic aspect, the experience of a number of years shows me that fully one-quarter of the teaching power is lost from a lack of hygienic surroundings. Especially is this true in country schools. It is impossible to properly instruct scholars when they are packed into poorly heated and badly ventilated school-rooms; they become stupid and ill-natured, cannot study, and the teacher becomes disheartened. He had hoped to see some legislation on the subject, and was glad that the County Medical Society are taking an interest in the matter. He hoped the time would come when teachers would be required to pass an examination in school hygiene; and, to show the lamentable ignorance of some upon the subject, cited the case of a teacher who, pointing to a ventilating aperture, complained that "no heat came from that register." Janitors, also, ought to be instructed in the matter. Representatives of the medical profession in school boards aid greatly in perfecting the work of such boards.

Dr. LORENZO HALE thought the hygiene of schools should apply to Sunday schools and churches, and especial care should be given to ventilation where one meeting immediately succeeds another in the same room. The new school house No. 5 is acknowledged to be the most perfect in Albany in its facilities for ventilation. The method there used is an imperfect imitation of the plan put in operation by Professor Knight in his renowned Hospital for Ruptured and Crippled, in New York city. Dr. Knight's prin-

ciple requires an adequate outlet for impure air. This is accomplished by an immense chimney, which is always heated by an inner metal flue conveying the escaping gases from the kitchen fire and from the fire for the engine that runs the elevator. Enormous registers in the floor, at short intervals from each other, conduct air from the lowest stratum in the room underneath the floor through trellis-like iron sleepers of open-work to the heated escape shaft. The coldest air and that containing the most carbonic acid is by this means removed, while by the usual styles of ventilation heat is wasted by the exit of hot air from the upper part of a room. In this hospital, fresh hot air enters through small registers about eight feet above the floor. Everybody has experienced the sifting of a little cold air against the back of the neck, which results from the eddying currents in old methods of ventilation; but in the method used by Dr. Knight an agreeable warm current settles down from the head to the feet. By placing the feet over the exit registers in the floor they are warmed as quickly as over a hot blast, and become perfectly dry, instead of becoming wet with perspiration, as occurs when standing over a hot-air jet. So powerful is the downward draft that no smell offends the nostrils from any part of the mammoth wards. At each end of the ward, and divided off only by a screen partition of about one-third the height of the ceiling, are as many as twenty water-closet seats ranged nearly in a circle; at the centres of these circles there are, in each, one of Dr. Knight's huge exit registers; and, although the water closets are in the sleeping and living-room of the patients, there is absolutely no odor at any time, either in the water-closet recesses or in any part of the room.

The powerful suction of Dr. Knight's chimney is tested by the pull that is felt by holding one's hat in any open flue leading to the shaft.

The heated ventilating chimney and the exit registers in, or at least near, the floor are the necessary factors in perfect ventilation of rooms; and these conditions solve the problem of wholesome houses with water closets not only within the enclosure of the walls, but even in any room desired.

President H. BENDELL, speaking from an experience of five years in the Board of Education of this city, and as chairman of the Committee on Hygiene of that board at the same time, said: Under the watchful eye of the Committee of Thirteen, changes to be made have to be well considered, and must be proven to be of real necessity before they can be inaugurated. Experience shows that the only way to obviate the danger and trouble arising from poorly constructed or defective drains and plumbing is to tear down the building and erect a new one planned by the most efficient architects. This applies not only to school houses, but to hospitals and tenement buildings as well. Neither is it proper to introduce new plans of ventilation into old buildings; the defect in such cases is radical, and the fault lies in the construction of the building. The principles underlying a properly constituted school house are the selection of a proper site for thorough drainage and the adoption of plans for heating and ventilating prepared by competent architects. Steam heat should be used for warming, and water-closets outside the building must be heated. School No. 8 is an example, perhaps, of the most nearly model school building.

The plan of taking down one old building a year and erecting a new one in its place, as in the case of Nos. 5, 8 and 2, is a sanitary improvement.

We who are urging this matter of improvement in hygienic conditions in school buildings are very much embarrassed by the inability of the Board of Education to enforce the law regulating nuisances. We have no authority to act promptly and independently of our local health boards in the removal from the neighborhood of school buildings of nuisances, the effluvia from which, entering the building, are detrimental to the health of teachers and children.

The attention of those entrusted with the management of our educational affairs should be directed to the importance of guarding, by a strict enforcement of hygienic laws, against any cause within or in the neighborhood of school buildings that tends to a development of disease from miasmatic influences, or in any manner interferes with perfect sanitary provisions.

Dr. THOMPSON thought that the teaching on this subject should not only be thorough, but simple, so as to be easily comprehended. When imperfect ideas are held, windows are opened, producing drafts, cooling the rooms below the proper temperature and causing the children much discomfort, besides endangering their health and life.

COLORADO FOR CONSUMPTIVES.

BY JAMES A. HART, M.D., COLORADO SPRINGS, COLO.

[BY PERMISSION FROM A LETTER.]

Dear Dr. Van Derveer:

Yours received yesterday. Regarding the climate of Colorado for consumptives, I could say a great deal more if you were to ask me in reference to your own private cases than I can as to what to teach to medical students. I think that any one of the three forms of pulmonary phthisis is to be benefited by residence in this climate, if sent here during the first stage, a great many if sent during the beginning of the softening stage, and but very few, if any, after the disease is so far advanced that large cavities have formed. Of course, acute tuberculosis is out of the question. I consider myself as an example of what can be done for a case in the stage of deposit. I have entire absence of symptoms, and am enjoying good health, but have no doubt that a physical examination would reveal dullness at each apex, prolonged tubular expiration, etc. The majority of cases coming here during this stage do well. Regarding the stage of

softening, I have seen a few cases where there seemed to be so much activity and such a marked general depression that nothing under heavens would make a favorable impression upon them. Those are cases which I think are far better off away from here, but it would be hard to separate them into a class by themselves, and nothing positive can be said, except to try the chances; on the whole, the chances during the softening stage are very favorable. Advanced cases so seldom improve that it is my custom to hurry them back as soon as possible to their friends, where they can die in comfort. To be sure, we have some such cases here who tell wonderful stories about what the climate has done for them, but you generally find a few such cases anywhere who have seemed to recover by accident.

I think the beneficial action of our climate is due to its dryness and the purity of the air. If meat, by being hung in the air, should become dry and remain sweet, instead of putrefying, why should not portions of the lung inclined to soften and suppurate likewise dry up?

There are all kinds of exaggerated ideas regarding the wonderful effects of altitude upon the system generally. One patient will complain of being terribly nervous, while another complains of being stupid. One says that his piles are so much better since coming, while another says that she never had them until she came. Consequently the climate receives the credit or blame for every thing.

During my visit east, the question was frequently asked regarding the effect upon cases of hemorrhage. We frequently have cases coming here who have had several hemorrhages at sea level and never have been troubled while here, and no case should be kept away from here on that account.

One very important element in our climate is our delightful sunshine, making the majority of our winter days such that patients can be out enjoying the pure open air.

INHALATIONS IN PHTHISIS.—Some patients claim to be relieved by inhalations of peroxide of hydrogen. De Renzi and Rummo (*Gaz. Med. Ital.*) give inhalations twice a day for two hours, in a small room, of spray of a solution of iodoform in turpentine. The effects were more satisfactory than with any other mode of treatment.— *Weekly Med. Rev.*

METHOD OF DEMONSTRATING THE PRESENCE OF THE TUBERCLE BACILLUS IN SPUTUM.

BY THEOBALD SMITH, M.D., A. M. C., '83, DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

[FOR THE MEDICAL ANNALS.]

In the examination of sputum for the *Bacillus Tuberculosis*, it is essential that the sputum be from the proper source, that the method of staining be carefully applied, and that the microscope employed be of sufficient power to bring the bacillus distinctly into view. Among the many methods and modifications of methods that have been suggested, or are in actual use, I select the one now employed by the discoverer of the bacillus himself. It is his original method considerably modified by Ehrlich and Weigert. In the second volume of the "Mittheilungen aus dem Kaiserlichen Gesundheitsamt," Berlin, 1884, he gives a very clear and minute account of it, of which the following is a brief summary:

5 ccm. of pure aniline (an oily, colorless liquid, later turning brown) is shaken up repeatedly with 100 ccm. of distilled water. In half an hour about 3 to 4 per cent. of the aniline is dissolved; the rest of the oil settles to the bottom. This mixture is filtered through a moistened filter, and the filtrate, if not absolutely clear, must be filtered again. The solution, or so-called aniline water, thus obtained does not keep, but must be prepared anew whenever it is to be used.

To 100–150 ccm. of absolute alcohol,* in a well-stoppered bottle, about 20 grm. of dry methyl-violet is added and the whole allowed to stand for several days. Repeated shaking, in the meantime, will aid the solution, which ought to be a saturated one. At the end of this time some of the methyl-violet should, therefore, remain undissolved in the bottom of the bottle, which may be utilized later on by the further addition of alcohol. Fuchsin, when used in place of methyl-violet, is treated in the same way. It is said to be better adapted for permanent preparations.

11 ccm. of the alcoholic solution of methyl-violet is now mixed with 100 ccm. of the aniline water, and the staining fluid

* 95 per cent. alcohol will probably suffice whenever absolute alcohol is spoken of.

is ready for use. Koch advises the further addition of 10 ccm. of absolute alcohol, which will preserve the fluid for about ten days without necessitating filtering each time it is used.

The sputum should be as free as possible from intermixture with the secretions of the pharynx, mouth, etc. The expectoration should not be a forced one, the irritation producing the cough being spontaneous and natural. In the foamy mucus will be found small, tough, yellowish lumps, sometimes few in number and sometimes making up the entire bulk of the expectorated mass. A small portion of such a yellow mass only should be chosen. Drawing it to the edge of the glass and up the sides, it may there be broken up into still finer portions with a scalpel and spread out in a very thin layer upon a chemically clean cover-glass (after soaking in nitric acid and washing in alcohol) and allowed to dry completely. Some suggest that two cover-glasses be rubbed together with the sputum between them, which will then become very thinly and evenly distributed upon both cover-glasses.

When dry, the cover-glass is drawn through the flame of a Bunsen burner (or alcohol lamp) three times with moderate rapidity, the side covered with the sputum being held upwards, so that the flame cannot touch it directly. Or it may be placed in a dry chamber at 110° C. for twenty minutes. This procedure causes firm adhesion of the layer to the cover-glass even while undergoing the manipulations to be shortly described.

Staining.—The preparation is stained by gently placing the cover-glass, with the dried layer directed downwards, upon the surface of the staining fluid in a watch-glass, where it will remain floating. At the end of several hours it is removed. The process may be hastened by heating the staining fluid with the floating cover-glass over a lamp until bubbles appear. It is then removed, and after waiting ten minutes longer the staining is completed. The former method is preferable.

Decolorizing.—The cover-glass, dark-blue on its removal from the coloring fluid, is transferred directly to a mixture of one part nitric acid and three to four parts water, floated about for a few seconds (at the longest thirty seconds) and then transferred for a few minutes to 60 per cent. alcohol, to remove the adherent acid. The preparation need not now appear colorless. Koch emphasizes this point, and believes that the many failures made in the application of the method are very likely due to the pro-

longed stay in the acid, whereby the color is finally abstracted from the bacilli themselves.

After-coloration.—From the 60 per cent. alcohol the cover-glass is floated upon a dilute watery solution of the complementary stain, vesuvin, if methyl-violet has been used for the primary stain; if fuchsine, methylene-blue. The solution can be prepared from a saturated alcoholic solution kept on hand whenever needed, and should be barely translucent at a depth of 2 cm. After a few minutes it is returned to 60 per cent. alcohol to wash away any adherent staining fluid.

The specimen is now prepared for examination by inverting the cover-glass over a drop of distilled water placed upon a microscopic slide. In general, the after-staining may be dispensed with, as its sole object is to give the various organized substances, including foreign bacteria, epithelial cells, etc., a color which will contrast with the tubercle bacillus and bring it into better relief. If the after-stain be omitted, the specimen is ready for examination after the nitric acid has been washed away in sixty per cent. alcohol.

Koch regards as indispensable in searching for the bacilli a one-twelfth inch water-immersion objective (especially that made by Zeiss, Jena) giving with proper eye-pieces an enlargement of 500–700 diameters, and Abbe's substage illuminator, by which the light is not only greatly increased in quantity, but the structural details of the histological elements are made to vanish, and a pure color picture is obtained. The bacilli amongst masses of detritus, invisible in many cases with ordinary means of illumination, will thus stand out clearly. Oil immersions are still better, but not so necessary as in the examination of sections of tubercle. The organisms brought to view appear as blue rods (if methyl-violet has been used for the preliminary stain; if fuchsin, red), very slender, slightly curved or angled, hardly ever straight, from one-fourth to one-half the diameter of a red blood corpuscle (.0015–.0035 mm.) in length. The field itself will have the color of the second stain, if that has been employed; otherwise it will be more or less colorless, the nitric acid having left the primary stain in the tubercle bacilli only. A systematic search of the whole cover-glass area is to be made by a proper manipulation of the slide-holder and record kept of the number of bacilli present in a certain number of fields, to serve as a means of comparing with other preparations and of roughly

determining the relative number present each day, if a series of examinations is being made.

If the specimen has been found a desirable one, it may be mounted permanently by removing the cover-glass* and allowing it to dry thoroughly, sheltered from the dust. It is then mounted in Canada balsam dissolved in turpentine, without heating. Other solvents of balsam are not recommended by Koch, although xylol has been highly spoken of by some. It is well to re-examine occasionally such permanent mounts, as the bacilli do not always retain the stain; some fade in a few days, others have kept their color for a year and longer.

Many modifications of the foregoing method have been proposed, not only for the primary stain, but also for the agent used in decolorizing. Some methods do away with the latter process entirely in using a double stain at the outset. Many agents have been suggested to take the place of the nitric acid, which I need not mention here. A search through the index of any medical journal for the past year or two will display them all. A thorough understanding and accurate application of this method ought to precede any attempt at modification. In the latter case the examination ought to be confirmed by an application of the original method to the same specimen of sputum until the modification has been found entirely trustworthy.

June, 1884.

THE mistaken diagnosis in the case of the late Dr. C. A. Taft, of Hartford, Conn., shows how prone even the most eminent are to error. These specialists, who claimed that the doctor had but one lung, were very much astonished to find, *post-mortem*, that he not only had *two*, but both were in the most perfect condition! The cause of death was inanition, due to induration consequent upon chronic gastro-intestinal catarrh, brought about, it is surmised, by the excessive use of alcoholic stimulants, prescribed under a mistaken diagnosis, and with a view to building up the lung tissue, of which he already had his normal amount. —*N. Y. Med. Times.*

* This may adhere to the slide if the water has partially evaporated, and unless care be taken the cover-glass will be broken. If a few drops of distilled water be placed along the edge of the cover, it will be drawn under gradually and elevate the cover; a slight push of the latter towards the water will hasten the process. The cover may then be easily drawn to the edge of the slide and removed, with the aid of more water if necessary. This should be allowed to accumulate along the edge of the cover and drawn off with filter paper.

WATER: ITS IMPURITIES, AND HOW TO PREVENT AND AVOID THEM.*

BY H. V. HULL, M.D., A. M. C., '74, SCHENECTADY, N. Y.

This seems so important a subject, so intimately connected with the well-being of the people generally, that it would appear impossible to present its claims too frequently or too strongly.

Water, a chemical combination of hydrogen and oxygen, is essential to the life of every living thing, animal and vegetable.

It is estimated that each individual requires about sixty ounces of fluids per day, and those cities which are provided with waterworks furnish from fifty to one hundred gallons of water per day to each inhabitant. This large amount is not used directly by each individual, but is required for domestic purposes, for manufacturing, street sprinkling, etc.

The water falling from the clouds may be absorbed in the earth, to appear again in springs or wells, or it may flow off to the sea through brooks and rivers. Spring water, which is often excellent, is at times the drainage of some far off swamp, and almost as filthy, by reason of its contained decaying organic matter, as bad well water. River water is more or less pure according to the soil and water-shed from which it is derived. If from swamps and peaty soil, it is dark and unpalatable; if from mountains, it is usually clear and fairly pure. It becomes muddy after heavy rains, especially in cultivated districts and more in spring and autumn, when the surface is disturbed by the plough.

Rain water will usually be comparatively free from mineral substances, and will readily form a lather when mixed with soap. When it does this it is said to be soft, and as such is largely used for domestic purposes. If the water after having fallen has percolated through the earth, it is quite apt to be highly charged with mineral substances. If it has passed over chalk or lime, it has taken up carbonate of lime, and such water feels hard to the touch, and will not form a lather with soap. In its habitual household use is one of the most active causes

*Abstract of Vice-President's address before the Schenectady County Medical Society, at the semi-annual meeting, June 10, 1884.

of urinary calculus. If water is too hard it is unfit for domestic uses, and interferes with the cooking of meats and vegetables. If such water is boiled, its hardness is diminished, as by this process the carbonate of lime is precipitated on the bottom and sides of the containing vessel.

Water is greatly influenced by the nature and quality of the soil it passes through, irrespective of the mineral substances it may take up, and even rain water in its passage through the air from the clouds to the earth will absorb carbonic acid, ammonia and other salts, and will entangle with itself particles of soot from smoke, dust, and even minute germs floating in the air. In fact, rain water will usually contain two or three grains of solid matter in each gallon. River water, while it may be soft, is nearly always impregnated with decayed vegetable matter, and, if in thickly-peopled districts, is quite apt to hold sewage in solution, which renders it highly dangerous to life and health. It is generally believed that our rivers may receive the contents of sewers, but through the influence of plant and animal life the water may undergo a complete chemical oxidation, and in running water that has flowed ten or fifteen (some say but two or three) miles all evidence of contamination may disappear. If this is true, it is a dangerous truth.

Water may be clear, sparkling and bright and yet contain a large amount of impurity. The earthy salts which are so often found in solution in water are of no particular importance when compared with the organic matter which it may contain. The nearest approach to pure water is found in deep wells with rock bottom, situated a long distance from any source of contamination, and in streams of upland and uncultivated districts. For example, water which shows no deleterious substances on chemical or microscopical examination may still cause disease in those who use it. A suspected well was closed by a local board of health. The families who were inconvenienced by its closure demanded that they should either be allowed to use the water or else convincing proof should be furnished that the use of it was dangerous to health. The most carefully conducted chemical and microscopical examination gave a negative result. The board of health then made a house-to-house inspection, with the result of finding twenty-three cases of typhoid fever among two hundred and nineteen persons in families who habitually used the water from the suspected well.

In the same portion of the town there were two hundred and seventy-one persons who used other water, and among these persons there had been but ten cases of illness of any sort during that season, and of these diseases there were but two cases of typhoid fever. This report could lead to but one conclusion. After closing the well there were no more cases of typhoid fever in that neighborhood than in any other part of the town.

This instance proves that nothing short of a physiological test, in the form of typhoid fever or some other zymotic disease, can convince the public that water may be clear and bright, have no unpleasant taste, and give almost a negative result on chemical examination, and at the same time be filthy and fatally poisonous.

Water may present nothing offensive or unusual to the eye, may be clear and without sediment, and have a disagreeable or disgusting odor or taste, which a chemical or microscopical examination cannot explain, and yet be used for domestic purposes without causing any noticeable increase of sickness.

The sources of organic impurity are two — animal and vegetable, of which the former is far the more injurious.

The use of water which has passed through swamps, and thus contains great quantities of vegetable matter, though not advisable without thorough filtration, is far preferable to the clear sparkling water from a well contaminated by sewage. The stomach and bowels may be disturbed by swamp water, but there will not be those fatal results which attend sewage poisoning.

During seasons of abundant rain, when the springs and wells are all filled, poisonous substances of all kinds are largely diluted, and are not so active in causing illness as in seasons of drought and low water, when whatever there is of poisonous substances in the water becomes more concentrated and thus more dangerous to life and health. In the autumn of 1881, a protracted drought was coincident with prevalence of typhoid fever in this locality.

Ice may contain impure matter in greater or less proportion, according to the impurity of the water, the rapidity with which the ice is formed and the locality of the ice formation — that is, whether the water from which the ice is formed is stagnant or flowing; whether it is taken from the surface of the water or whether the water was frozen to the bottom of the pond or stream, and thereby included all foreign substances.

The report of the scientists appointed to consider the possible dangers resulting from the use of impure ice at Newport, R. I., published in 1882, stated that water in freezing does free itself from substances which in solution will give a fluid of a specific gravity greater than water alone, and also from those fluid substances which require a lower temperature for congelation. But even in these cases the frozen water retains traces of these substances entangled throughout its mass, and solid particles floating in suspension are entangled in the ice, and these vary in size from a floating carcass or fæcal matter to the extremely minute germs of infectious bacteria. Ice taken with great care from the centres of blocks and introduced into sterilized infusions of beef produced rapid putrefaction, thus showing conclusively that pond ice contains living germs Germs of infectious disease are retained unaffected, and from their comparative lightness are so concentrated that they exist in even greater quantity than in the same amount of water under similar circumstances at other seasons of the year. Dry cold, even below zero, does not destroy the life of bacteria—the anthrax or vaccine species, for example. Undertakers should be instructed to caution the relatives of deceased persons to remove the ice which has been in use for the purpose of preserving corpses to a place where it cannot be used again for any purpose. Ice exposed to nothing more than the emanations from a corpse absorbs large quantities of organic matter, and if used for domestic purposes is likely to cause illness. Not long since, ice which had been used about the body of a child who had died from scarlet fever, in Gloucester, N. J., was used to cool water which was drank by children, who contracted scarlet fever by its use. These children had not been in any other way exposed to the disease, and the child who died had contracted the disease in another town.

A variety of porous, sandy soil, such as that on which our city of Schenectady is built, will readily admit of thorough saturation, not only with soil water, but also with sewage and refuse matter.

Strata of a loose, porous nature often lie upon an impervious under stratum of such inclination that, though one end of this layer may crop up above the surface of the soil, yet its lower portion may bend in such a manner as to meet the lower part of a well. Liquid matters on the surface, where such a stratum appears at the level of the soil, may be as directly carried down,

following the inclination of the stratum, as they could be by flowing through an earthen-ware drain pipe. In this manner the well is made impure, greatly to the astonishment, sometimes, of its unsuspecting patrons.

It is said that "a well drains an inverted cone of soil, the apex of which is the bottom of the well;" but we see from the foregoing that drainage is not confined to such a space. The sanitary engineer's rule is that "a well ordinarily drains the circle of which it is the centre for a radius of five feet for every foot of its depth." Therefore, as an example, in case of a well ten feet deep, its water would be contaminated if any liquid refuse matter should be thrown on the surface of the soil within a radius of fifty feet from the well. How many wells ten feet in depth in this city are so situated that there is not foul matter of some sort on the surface of the soil within a much less distance than fifty feet from the mouth of the well? There are very few premises, especially in the more thickly settled portions of this city, on which there is a well where there is not also a privy vault (and in not a few instances a foul cesspool also), the contents of which are incessantly soaking through loosely laid up walls into the surrounding porous, sandy soil, and it is seldom that the well will be found to be as far distant from the vault as twenty feet. Builders, when excavating foundations for buildings in the older portions of the city, often light upon old forgotten vaults. The idea of emptying a vault seems to occur to the minds of most of our citizens but rarely. Calamitous results are certain, sooner or later, to occur from such wholesale contamination of the soil.

Attention should be given to a most insidious manner of pollution of wells. In a number of instances householders here have ceased using their wells. To the owner of the well it seems a pity to not apply the old well to some good use, and to him comes the brilliant idea of using it as a cesspsol, and thus saving the cost of drain pipes to remove the waste water from his house. After a little time the water from his neighbor's well is noticed to have an unpleasant taste or odor, which grows worse and worse, until finally (after, perhaps, cleaning the well, which causes no change for the better) that water also can no longer be used. When a well is defiled in such a manner, it usually follows that every well that receives its supply from the same water-bearing stratum of soil which furnishes the water to

the polluted well is tainted with the same foul matters, and perhaps to the same extent.

But some of our citizens, exposed to the dangers of drinking polluted water for a long time, now consider that they are proof against that danger. Then, again, there is a class of people that actually continue to use impure water rather than to spend the money necessary to secure pure water for family use.

It is a wonder that the human system can resist so much and often for so long a time. It certainly becomes accustomed by use to the poison of impure water, just as it will sometimes to opium and arsenic, and resists its evil effects. But it is often the case that after a person has for a long time been living under such poisonous influences there comes a time when, from some other cause, he becomes debilitated, and *then*, while the powers of resistance are feeble, he is quite likely to succumb to the effects of the same bad water (or impure air, as the case may be) which he had seemed, while in his usual state of health, to endure with impunity.

It is important that the water which is used by milch cows should be strictly pure and not from stagnant, filthy pools. Milk from cows which have drunk stagnant water contains suspicious forms of bacteria, and produces dangerous illness.

The conveyance of typhoid fever by milk from cans which have been washed with water tainted with excreta has been verified many times.

Soft water dissolves lead as it passes through lead service pipes. The Cochituate water of Boston is said to always contain traces of small quantities of lead. The Croton water of New York which has stood over night in the pipes is said to contain one-tenth of a grain of lead per gallon — sufficient to produce lead poisoning in some instances. In the case of hard water, lead service pipes, after moderate use, become coated on their internal surface with insoluble compounds (as sulphate of lead), which prevent contamination of the water by further use. Water passing through galvanized iron pipes always contains traces of zinc salts, not, however, in injurious amounts. Soda fountains with lead pipes are quite apt to deal out poisonous soda water, the carbonic acid with which the water is charged taking up the lead in its passage through the pipe.

For many kinds of impurities the senses of sight, taste and smell afford more valuable information than the processes of the

chemist. The conclusions of Prof. Mallet and Ripley-Nichols [given at length] support this opinion. Pure water should be perfectly tasteless, without color or odor. Simple tests: (1) Fill a colorless glass bottle with the suspected water; look through it at a dark background. (2) Fill a bottle partly with the water, smell of it, set it aside, after corking securely, for a few hours, then shake it and smell again. Warming the water and adding a little liquor potassæ will often render the odor more distinct.

The Purification of Water.—Without advocating the selection of confessedly impure waters and attempting to purify them, yet, under some circumstances, it is necessary to advise methods of purifying water. The chief methods adopted are distillation, boiling, subsidence and filtration.

Distillation is conversion of water into vapor and its recondensation by cooling, the impurities being left behind. The water by this means is produced in its purest state. It is, though bright to the eye, not palatable, but it is indispensable for chemical and medicinal purposes. On a large scale fresh water is now distilled from sea water for the use of ships, especially in long voyages.

Boiling is requisite to destroy minute organisms and germs. From the researches of Dr. Dollinger and others we have proof that the thermal death point of most forms of bacteria is about 55° C. (120°F.), though some species have lived at a temperature somewhat above this point. After being boiled, the water should be exposed to the air for a time to absorb again a portion of oxygen and carbonic acid.

Subsidence permits the settling down of impurities. By the exposure to air water is much softened, and the settling-bed thus serves two ends.

Filtration is far the most important means, from a sanitary point of view, and is the favorite method for purifying water for use. Filtration is carried on on a very large scale by those water companies which supply large cities, and their filtering beds are elaborately prepared. Filtration on a small scale is now the rule in most well-regulated households, and private manipulation is not usually superfluous with the best water supplied by any company. The chief materials used in the construction of filters for private families are animal charcoal, silicated carbon, carbide of iron, spongy iron and sand. Vegetable

charcoal is also used to some extent, especially in the construction of cheap filters for domestic use. It is not considered as good a material for this purpose as animal charcoal, as the latter greatly exceeds the former in its power as a disinfectant. When animal charcoal is used, it must be specially prepared and well burned. If any of the animal matter be left in it, it becomes (as shown by a report of the London River Pollution Commissioners) a breeding place for myriads of small worms, which pass into the water. With the other materials mentioned as are made of burnt shale, or, as is the case with the carbide of iron, taken from the interior of blast furnaces, there is, of course, no risk of this.

Of all forms of domestic filter the glass decanter with a solid carbon or silicated carbon block seems to answer most of the requirements of an efficient, uncomplicated filter for family use. It has also the great advantage that every part of it can be seen, so that it can be kept scrupulously clean. These filters go on working perfectly well for a very long time, requiring scarcely any care beyond cleansing the surface of the block of carbon occasionally with a hard brush. Filters, however, like most things, will not go on working forever, and attention from time to time is necessary. Says a distinguished authority on this matter: "All filters, after a time, become clogged up, and have, therefore, to be taken to pieces and thoroughly cleaned; or, if this cannot easily be done, they may be purified by passing through them a strong solution of potassium permanganate, with the addition of a few drops of strong sulphuric acid, and, afterwards, two or three gallons of pure or distilled water, acidulated with hydrochloric acid. The charcoal in a filter may also be purified, to a certain extent, by exposing it for some time to the sun and air or by heating it in an oven or furnace;" though it is always by far the better plan to replace the old charcoal with that which has been freshly burned. In case of a cistern which is built so as to allow all the water it receives to pass through a filtering medium, the material of which the filter is composed—usually pebbles, sand and charcoal—should be taken out, the pebbles and sand well washed, and the charcoal replaced by some which is fresh. This should be done certainly as often as every two or three years, and the cistern ought to be built in such a manner that this may be done easily.

At Antwerp, the turbid, polluted water of the river Nethe is "rendered colorless, bright, palatable and fit for dietetic and domestic uses," by filtration through spongy iron, and it is the opinion of no less an authority on the subject of water analysis than Prof. Frankland that specific living germs are destroyed by this process. This shows conclusively the remarkable power which is possessed by spongy iron to purify polluted water, and perhaps may be taken as an answer to the question of whether it is possible to so improve a suspicious water supply, employed from necessity, as to remove the danger.

REPORT ON TRICHINOSIS AT ARIETTA.*

To J. Savage Delavan, M.D., Chairman of Committee [of State Board of Health of New York]:

On the 2d of July, inst., Dr. J. E. Burdick, of Johnstown, stated to me that he had in charge several cases of fever of some kind at Arietta, a hamlet in Hamilton county; that there was some doubt regarding the nature of the sickness, and that the inhabitants of the place were quite alarmed regarding it. At the same time he requested that I should investigate the matter with as little delay as possible. Believing the cause to be one meriting the immediate attention of the State Board of Health, I visited Arietta on the 3d of July, inst., and reported the result of my observations to the secretary, and by your request have made some subsequent observations.

Following is an account of what I have done and found:

On my first visit I learned that there had been twelve cases of sickness more or less severe, and at that time one death. There has been one death subsequent to my first visit. The sickness showed the symptoms of trichinosis well marked. The persons sick had all eaten raw ham at about the same time† (June 5 to 7), and from the same ham. All who ate of the ham raw were more or less sick, and none who did not eat of the raw ham were sick. They were all taken sick at nearly the same time. They consisted of the family of Oliver Bonville and boarders in his family. All who had been sick enough to be attended by

* Portion of a paper read by J. Savage Delavan, M.D., A. M. C., '61, before the Medical Society of Northern New York, at Saratoga, August 6, 1884.

† Within a day or two; impossible to get exact dates in all cases.

physicians had more or less fever, but no record had been kept, and they were visited only at intervals of two or three days. In some cases the temperature was as high as 103° F. The prominent symptoms were diarrhœa and vomiting, fever, sweating, œdema, especially of the face, lameness and muscular soreness and sleeplessness in the adults. In the case of George Sumner, whom I saw about twelve hours before his death, there had been some circumscribed pneumonia apparently. There was hoarseness also in his case, and at the time of my visit his respirations were 39 per minute.

Emma Jane Swan, aged 22, was taken sick June 8 with diarrhœa and vomiting, followed by fever. She was removed to her home at Newkirks, where she died June 25. She had œdema of the face. As she died before my visit, I did not see her.

Oliver Bonville, aged 38, was taken sick June 9 with diarrhœa and vomiting, followed by fever. He had œdema of the face, lameness, sweating, and could not sleep. He was convalescing when I saw him July 3.

Paulina Bonville, wife of Oliver, aged 36, was taken sick June 8 with diarrhœa and vomiting, followed by fever. She had œdema of face and extremities, sleeplessness, sweating, formication, lameness and vesicular eruption, and was still sick July 11.

Elizabeth Bonville, daughter of Oliver, aged 10, was taken sick June 8 with diarrhœa and vomiting. She had fever, sweating and œdema of eyes, and was sore and lame. She could sleep. She left her bed July 1, and was convalescing.

Eugene Bonville, son of Oliver, aged 8, was taken sick June 8 with diarrhœa and vomiting, followed by fever. He had œdema of the face, sweating and lameness, and was convalescing July 3. He could sleep.

George Sumner, aged 34, was taken sick June 8 with diarrhœa and vomiting. The diarrhœa continued during his sickness. The vomiting continued one week. He was sleepless; said he could not sleep. He sweat all the time. He had fever. His face was much swollen, especially about the eyes. He had some circumscribed pneumonia. He was hoarse. July 3 his pulse was 96, temperature 100° F., and respiration 39. He died on the morning of July 4.

Joseph Barney ate sparingly of the same ham, and was not sick nor quite well; he was somewhat lame and sore, but kept around.

John Marshall ate of the same ham, at the same time, but had read about trichinæ and ate but little. He was attacked much the same as the others, but got better and went to work in the woods; he was not quite well, but complained of lameness. He called upon me July 12, in my office, and still had diarrhœa and lameness.

Peter Mayhew, aged 28, was taken sick June 8 with diarrhœa and vomiting, followed by fever; diarrhœa continued two weeks; he had œdema of face and extremities and great sweating; he could not sleep well; his lameness was not marked. July 11 his pulse was 96 and his temperature was 100° F.

John Burton, aged 29, was taken sick June 8, but went to his work in the woods, and staid a week; he had a slight chill and was somewhat nauseated; he had diarrhœa, but not much sweating; he had fever; he could sleep fairly; he had œdema of face and extremities and lameness, with some itching; he was convalescing July 3.

John Gilbo, aged 24, was taken sick June 8 with diarrhœa, without vomiting; his symptoms were, in addition to the diarrhœa, sweating, sleeplessness, œdema of the face and extremities and notable lameness; he was convalescing July 3.

D. J. Lyons called upon me July 11; he ate of the same ham, raw, at the same time with the others; he had diarrhœa two or three days afterward, and has not been well since then; he has felt dull and lame, and has had twitching of the muscles.

George Sumner died July 4, and was buried July 5. Although the facts already known pointed so unmistakably to trichinosis as the disease from which these sick persons had been suffering, I thought it wise to demonstrate the actual presence of trichinæ. In pursuance of this object, on the 7th of July, accompanied by Dr. J. E. Burdick and Dr. P. R. Furbeck, I disinterred Sumner's body and secured portions of the flexor muscles of the arm and leg, which I placed in your possession on July 8. These gave abundant evidence of the presence of trichinæ.

By your direction, I have also made an effort to ascertain the source from which the ham which caused this sickness was obtained. Mr. Bonville bought the ham on the 30th of May last of L. E. Bradt, in Garoga. Mr. Bradt bought the ham of Clark & Wood, in Fort Plain. The bill is dated April 3, 1884. I enclose correspondence had with Clark & Wood, which shows that the ham came from Chicago; that it was bought of John

Taylor, Trenton, N. J., and was packed by Thorn & Co., Chicago.

Respectfully submitted,

EUGENE BEACH.

REPORT OF MICROSCOPIST.

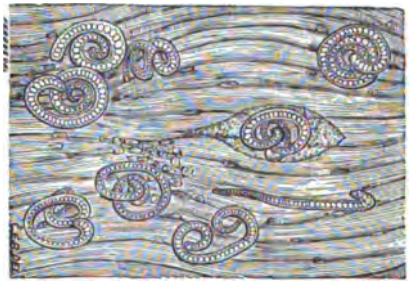
ALBANY, *July* 12, 1884.

Dr. J. Savage Delavan, Chairman of Committee on Vital Statistics:

Dear Sir—I find upon microscopic examination of portions of human muscle recently received from Dr. E. Beach, of Gloversville, N. Y., that trichinæ exist in great abundance (twenty-seven in a single field — about 3,000 to the cubic inch).

Some of the worms observed were already enclosed with a transparent cyst, while many were only partially rolled up or coiled upon themselves; others were free in the tissues. The muscular tissue examined was from the extremities.

From the above facts we are justified in concluding that it is an unmistakable case of marked trichinosis of recent origin.



FRESH TRICHINOUS INVASION.
Portion of field showing encysted face coiled and uncoiled trichinæ. Specimens from the Arietta Case.

The following is a brief resumè of a few well-known scientific facts concerning trichinæ:

When infested meat is taken into the stomach in a raw or partially cooked condition, the cysts which surround the trichinæ in their adult state are removed by digestion and the worms set free. They increase in size, and on the second day the male and female reach their full sexual maturity; six days after their maturity the females produce from 1,000 to 1,500, or more, living filamentous embryos. The young immediately begin to wander and invade the surrounding tissues; they pierce the intestinal

walls and finally reach the voluntary muscles of their host, growing larger and absorbing the vital juices from the tissues through which they pass. They are found in greatest abundance at the insertion of the muscles with the tendons, where they roll themselves up and become encysted, at first transparent and difficult to see, but later presenting a whitish appearance, in consequence of a deposition of calcareous matter, etc., about the cyst, which renders them visible to the naked eye. They remain viable for many years.

Prevention of Trichinosis.

1. Meat should not be eaten raw, nor in a partially cooked condition.

2. Thorough cooking is a perfectly efficient means of killing trichinæ. Large masses of meat (such as a ham), however, require several hours continuous cooking for the heat to penetrate throughout the entire mass. A medium sized ham boiled for thirty minutes reaches a temperature of a little above 100° F. It requires 140° F. to positively kill the parasite. In the case of chops, steaks and other small portions a much shorter time will suffice. A thorough broil of a few minutes will effectually destroy the life of the trichinæ. Ordinary salting and smoking does not destroy the parasite

3. Thorough inspection of the meat. A regular examination should be made by the state. The matter is easily accomplished. The parts required for a perfectly satisfactory examination are two small fleshy masses situated near the kidneys, called the pillars of the diaphragm. These pieces belong to the "trimmings," and their removal in no way interferes with the value or appearance of the dressed hog.

"All hogs should be subjected to microscopic examination by experts, and no hog allowed to be cut up for sale as food until such an examination has been made. Those found invaded should be branded trichinous and their sale as food forbidden by law under penalty of a heavy fine."—Billings.

A certificate could be given if examination proved satisfactory.

4. Prevent hogs from feeding upon raw offal and excrement, and avoid using the offal, etc., of animals subject to trichinosis, as a fertilizer.

5. The thorough destruction of all offal, excrement, etc., so that vermin (rats, etc.) may not devour it and become the carriers of this dread malady.

Rigid legislative enactment regulating the inspection of meat, the proper disposal of offal, excrement, etc., would, if properly enforced, go far toward stamping out this loathsome disease.

Very respectfully,

WILLIAM HAILES,
Pathological Laboratory, Albany Medical College.

ABSTRACTA.

THE CHOLERA.—I have recently spent some weeks in examining the sanitary condition of the towns upon the north coast of the Mediterranean from Marseilles to San Remo, and, as I devoted three days to Marseilles and Toulon, I may, perhaps, contribute some observations which will be of interest during our present anxiety as to the chance of a general invasion of cholera.

With Toulon, Europeans generally have but little concern beyond the fact that it is upon the main line of railway from Marseilles to Italy. Otherwise it is simply a vast French dockyard, like our own Portsmouth. It is not a port for general travelers, like Marseilles, and very fortunately so, for of all places I know, Toulon is about the most fitted to become a nest for the manufacture and propagation of cholera.

Nearly surrounded by a mountainous range of hills, Toulon itself is quite flat, and almost upon a level with a tideless, land-locked shallow bay, into which all the filth of the town runs. This bay has been excavated to a uniform depth of about 10 mètres (33 ft.), and is of considerable size, very much larger than the harbor at Portsmouth. But it is so completely land-locked by its headlands and by a long mole built across nearly from point to point, that the bay really serves as a permanent receptacle for the sewage of the town. To what extent the oxidation that goes on in the water of this bay neutralizes the sewage it is difficult to say. Certainly the low level of the old town must practically prevent a free escape of sewage from the subsoil of the town, and its narrow streets were indescribably filthy and malodorous when I was there. The buildings in the old town are as bad as in any French town I know. For Toulon, situated as it is, there is only one way of making it permanently

safe, and that is by conveying the sewage of the town backwards from the land-locked bay, and then pumping it up and allowing it to be used by the suburban agriculturists. Or, possibly, the sewage might be discharged into the outer harbor at some suitable point, and here the freedom of movement of the water and the large area for oxidation might neutralize the sewage as fast as Toulon can pour sewage out. But in either case pumping would be necessary in order to keep the subsoil of the town from being saturated with sewage as it now is.

As to water supply, no town could have more natural advantages. Its amphitheatre of mountains would, from several points, supply an abundance of water that might be delivered to the tops of all the houses by gravitation, and be a constant supply perfectly safe from contamination. Some water is brought down from the hills, which, at any rate, supplies a few puny fountains, and some of the houses may have water laid on. But I had seen enough of Toulon to satisfy me that it was a place for patients neither to go to, nor to stop at. I was refused admission to the Arsenal, and did not investigate the water supply further, as it would have detained me another night at Toulon.

In Marseilles we have one of the most ancient and interesting cities in the world. The home of recurring pestilences probably ever since it has been a city, the chief paintings in the town, those at Consigne, at the north corner of the entrance to the port, are devoted to depicting the horrors of the plague, the cholera and yellow fever. But Marseilles has now the finest water supply in the world, and, therefore, it will probably never again become really a nest for the propagation of cholera. Till recent years Marseilles was another Toulon. Its wonderful oblong port, excavated by nature in the rock precisely as an engineer would have designed it, must have made Marseilles the most ancient seafaring city upon the Mediterranean, and the traditions attached to the bare rocky hill of marble and its crowning chapel of the Virgin upon the south side of the port all bear out such surmises as to its ancient maritime importance. From this grand old harbor the ground rises on all sides into a mountainous semicircle, which completely incloses the town. In summer the town is like a Dutch oven, and, there being no single brooklet of water within this narrow amphitheatre of hills, the condition must have been shocking when all water had to be

doled out by watercarts. Then, again, the port, though wholly a natural formation, is much smaller than that of Portsmouth and with an outlet as narrow. No rill of water runs into the port, and, being upon a tideless sea, the port became a vast stinking pool, in which all the filth of the town accumulated and fermented. Add to conditions like these the life and buildings of a dirty, crowded French seaport, and we have a city which in former times must have been a natural home for pestilence. Toulon had not the general importance which the splendid port of Marseilles must have given to it at all times. But of late the French engineers have built the great mole which locks up the waters of the inner harbor, and this it is which has aggravated the condition of Toulon.

I have said that Marseilles had probably the finest supply of water in the world. Its people took gradually to living in suburban *bastides*, or villas, when not actually required in their business. Still, the city grew so vastly in importance and in population, and the absence of water became so intolerable that in 1839 heroic measures were resorted to, and a sum of over two millions of English pounds sterling has been expended in bringing the pure waters of an Alpine river (the Durance) into the town.

This canal took ten years to complete, and is fifty-four miles long. The canal begins near to Pertuis, more than 600 feet above the level of the Mediterranean, and, descending about twenty-seven inches to the mile, conveys 1,250,000 tuns of water per day to Marseilles, where it is still 500 feet above the Mediterranean. The canal terminates by taking a circuit of some twenty-five miles round the crest of the amphitheatre of hills within which Marseilles lies. From this circumambient canal the water descends by gravitation through iron pipes, supplies hundreds of grand fountains, and sends water to the tops of all the houses. The surplus deluges the gutters in all the streets, sweeping the refuse of the city away into the port, and causing a constant outflow of water, which keeps even the old port in tolerable condition.

In the course of this grand canal forty-five costly tunnels have been made through hills that could not be avoided, and numerous aqueducts carry the water over secondary rivers and across deep valleys. The grandest of these aqueducts is that at Roquefavour, which crosses the ravine of the Arc (five miles

rom Aix). I have walked through and studied both this aqueduct and the great aqueduct known as the Pont du Gard, which was built by the Romans to supply Nismes with water, and is the grandest of the monuments left by the great Roman architects in the south of France. Though the Pont du Gard no longer carries water to Nismes, this grand aqueduct still stands, and is always worth a day's journey to contemplate. It spans its lovely valley, still so perfect after the lapse of sixteen centu ries that I actually made my way through the whole of its original water-way at a height of 160 feet from the level of the river which it spans, and there is the channel lined with calcareous fur, like that which to-day encrusts the inside of our tea-kettles, but in slabs six or eight inches thick, and not only a great contraction in the original area of the water-way, but a source of consolidation which has probably held together this vast masonry till to-day. But the Marseilles architect, though he could not improve upon the plan of the Roman builder, has surpassed him in the magnitude of his work. The modern aqueduct of Roquefavour, which carries the water to Marseilles, is 1,287 feet long, and more than 100 feet higher than the Pont du Gard. Each of these great works took me a day to visit, but were I at Nismes or Marseilles again next week, and could spare the time, I should visit them again. This great Marseilles aqueduct has already turned a bare, dusty, rocky desert into singularly fruitful gardens, as well as making Marseilles one of the safest cities in the world in its power of resisting the invasion and settlement of cholera. But its sanitary authorities do their duty in such junctures as the present. To make Toulon safe it must be treated as Toulon has already been treated.—*James Edmunds, M.D., M.R.C.P., London, Medical Officer of Health for St. James's, London. From The Times.*

VENTILATION.—Two registers, one near the floor for escape of carbonic acid gas and one near the ceiling for escape of hot and impure air, are connected in every room of the house with a metal cylinder which leads to a turret or exhausting shaft acted upon at its exit from the roof by a heated coil, which sucks the air constantly out, even when windows and doors are closed. Night and day the stale air of the house is thus constantly exhaled, while fresh air forces its entrance without the creation of a draft.—*Dr. T. G. Thomas, New York, in Denver Medical Times.*

VIRCHOW ON CHOLERA, in a series of popular articles in *Die Nation*, a weekly political journal of Berlin, condemns the French for carelessness, and takes a conservative view of the significance of the cholera bacillus. In a speech at the public reception of the Cholera Commission on their return to Berlin, he said: "It appears to me that the government is not entirely free from the opinion that with the discovery of the bacillus every thing is accomplished which may be necessary to control the disease. . . The tubercle bacillus is a very important thing, but, with the exception of a new point of view of the disease, we are no further advanced in our practical relations to it." He said that cholera had long been treated as if caused by a special organism. He referred also to the laxity of English quarantine.—*Maryland Medical Journal.*

IPECAC IN CHOLERA.—Large non-emetic doses, from a scruple to a drachm, were advised by Surgeon-General A. A. Woodhull, U. S. A. (*Atlanta Med. and Surg. Jour.*, 1874). The patient is to be quietly recumbent and abstain from fluids for some time after a dose. A preliminary full dose of laudanum is often needed to prevent emesis. This same plan has given striking results in dysentery, in hemorrhage and in collapse. M. Bourdon, in wards of La Charité, used the treatment with success in 1874 for cholera infantum which resembles true cholera. M. Decugis (Woodhull says) stated that in 1832 physicians used ipecac, and Grisolle considered it a specific, but when used in the ordinary way it was of but slight utility. But in a large dose ipecac is sedative, as pointed out by Waring, who also recommended it in cholera.—*Phila. Med. Times.*

RATTLESNAKE BITE was the cause of death in New York city recently. Some years ago, before a commission of medical men in Philadelphia, a man, for a money consideration, allowed himself to be bitten for the purpose of proving the value of *Plantago major* (common Plantain), and the result was satisfactory. —*N. Y. Med. Times.*

NEURALGIA AND RHEUMATISM of a malarial origin, and most seem to be such, have been relieved by Tongaline in conjunction with quinine, the therapeutic properties of both seeming to be accentuated under these circumstances.—*Med. Brief.*

FATAL SUNSTROKE never occurs in a person who abstains from alcoholics.—*Dr. G. R. Patton, Minnesota.*

THE MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

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JNO. BEN. STONEHOUSE, M.D., WILLIS G. TUCKER, M.D.

VOL. V. AUGUST, 1884. No. 8.

——THE selection on Cholera and the extract from the article on Trichinosis, read by Dr. J. Savage Delavan before the Medical Society of Northern New York, occupy space in this number for which other matter had been designed.

PERSONALS AND LITERATURE.

Dr. G. A. Dorin, Superintendent of the New York State Idiot Asylum, at Syracuse, has resigned.

Dr. John Bassett Chapin, Medical Superintendent of the Willard Asylum, has been unanimously elected Superintendent of the Pennsylvania State Hospital for the Insane, the position formerly filled by the late Dr. Thomas S. Kirkbride.

NEW YORK STATE BOARD OF PHARMACY.—The Governor sent in on July 9 the following selection of names to comply with the recent law organizing the Board of Pharmacy of the State of New York: Alfred B. Huested, M.D., Albany; J. Hungerford Smith, Au Sable Falls; Clark Z. Otis, Binghamton; Edward S. Dawson, Jr., Syracuse; Curtis H. Haskin, Rochester. According to the provisions of the law, the first meeting to organize occurs in Albany, September 2 (Tuesday).—*N. Y. Pharmaceutical Record.*

R. D. Clark, M.D., A. M. C. honorary, 65 Grand street, Albany, was appointed, July 1st, 1884, Chemist for the New York State Dairy Commissioner, J. K. Brown, of Oneida county. The duties of the chemist are to make analyses of adulterated food of all kinds, especially milk and butter, coöperating with local boards of health and facilitating their work.

The American Journal of Ophthalmology. J. H. Chambers & Co., publishers, St. Louis, Mo. $2.50 a year. The prominent names of American ophthalmologists mentioned in conjunction with Dr. Adolf Alt as contributors to this journal, coupled with the fact that the same is issued monthly, and the matter presented to its readers original, brief and instructive, will insure for it a liberal circulation, to which it is justly entitled. The journal is printed in clear type, is well arranged, and reflects credit to the editor and publishers. H. B. & G. S. M.

The American Druggist, New York, monthly, $1.00 a year, quarto size, is one of the marvels of American literature.

"The Urine in Disease," a chart, is given with the *Medical World* (20 octavo pages, monthly), Philadelphia; $1.00 a year.

American Public Health Association: Circular Preliminary to the Twelfth Annual Session of the Association, October 14–17, 1884, at St. Louis, Mo.

Report to the Secretary of the Treasury on the Administration of the National Quarantine Service and the Epidemic Fund, February, 23, 1884, Treasury Department, Marine Hospital Service.

Answer of the Supervising Surgeon-General to the National Board of Health, March 12, 1884, Treasury Department, Marine Hospital Service.

Before the Committee on Public Health of the House of Representatives: Argument of J. Coleman, of counsel, March 20, 1884. Government Printing Office.

Dr. S. D. Gross: Commemorative lines by Dr. D. W. Yandell.

Fort Wayne College of Medicine: Announcement.

Bellevue Hospital Medical College: Announcement.

Niagara University Medical Department: Announcement.

Alumni Association, Albany Medical College: Proceedings of the Eleventh Annual Meeting, with report on Alumni Prizes, and announcement of Alumni Lectures.

Albany College of Pharmacy: Catalogue of 1883–4 and announcement for 1884–5.

Albany Medical College: Catalogue of fifty-third session, 1883–4 and announcement for session of 1884–5.

THE

MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

VOL. V. SEPTEMBER, 1884. No. 9.

ANAL FISSURE.*

BY JOHN THOMPSON, M.D., ALBANY.

Fissure of the anus consists of a narrow crack, or a solution of continuity, of the mucous membrane of the anus, extending upwards into the rectum, where it may communicate with an ulcer, which is likely to be located between the external and internal sphincters. The fissure usually terminates externally in a small cutaneous projection that many times is taken for the source of the great annoyance and discomfort experienced. The disease will generally be found among nervous, hysterical, sedentary females, who are weak and irritable, with a constant tendency to constipation. Men are often sufferers from fissure who are enfeebled from scrofula or tuberculosis, and many who have been the subjects of syphilis will have a warty excrescence of the anus, complicated with internal piles, ulcer or fissure.

[Dr. Thompson exhibited several large colored representations illustrating anal fissure and rectal ulcer, copied from Bodenheim, for this occasion, by Mr. Leonard Ochtman, a popular artist of Albany. At the conclusion of the discussion these copies were presented by Dr. Thompson to the Cohoes reception committee.]

In fissure of the anus there is intense pain and spasmodic contraction of the lower sphincter muscle of the rectum, with general irritation of the surrounding parts. The pain is almost

* Portion of a paper read at the reception given by the Cohoes members to the Medical Society of the County of Albany, in Cohoes, on Wednesday evening, March 26, 1884.

intolerable, at times of a burning and boring character, lasting from one to four hours after a movement of the bowels. I have selected two cases, which I think will sufficiently illustrate the disease.

Case I. (Acute).—On January 21, 1883, I was first called to see Mr. M., aged 46 years, by occupation a merchant. On arriving at his home I found him suffering most acute pain from what he supposed was piles. For some days he had not been able to leave his room to attend to any business. On questioning him as to the history of his attack of pain, he said that for about four weeks he had had pain after each evacuation of the bowels, lasting from two to four hours; the pain was so intense at times that he was unfit to transact any business. After apylying all the domestic remedies that friends could suggest, without relief, he then sought the advice of a well-known apothecary, who has a reputation for much skill in chemistry. He remained for some time under the care of the apothecary, who exhausted his most devoted energies in his efforts to relieve his patient of pain, but without avail. I found Mr. M. on a lounge, suffering the most acute pain. On examination externally I found the anus contracted spasmodically. He would not let me make a digital examination, his sufferings were so great; however, I saw sufficient to convince me that my patient was not suffering from piles, for there was the small cutaneous projection, which is pathognomonic of fissure of the anus.

Case II. (Chronic).—Miss C., aged 30, by occupation a servant, sent for me on February 12, 1884. On arriving at her home I found the patient in bed, looking excited and nervous. I questioned her as to why she was so much disturbed mentally. In answer she said that she had been sick or in failing health since the spring of 1882. The first symptom noticed was pain after going to the water closet. This condition continued all through the summer. The severe pain was accounted for by her female associates as due to womb troubles of some form. So matters dragged along from bad to worse until the summer of 1883, when she was obliged to quit work and seek rest and treatment. The courses had entirely ceased from that time. When the bowels moved which was seldom, say once a week, the stools were hard, dry and irritating to the raw surface of the rectum. For some months there was at times considerable blood passed. About eight months ago she commenced to lose control of her

nervous system; on the least excitement she was liable to drop down in hysterical spasms. While in health, she vouches that she was not nervous nor hysterical at any time. For three months before I saw the woman she would go into fits in bed, and remain unconscious for an hour or more at a time. Upon examination of the heart there was found a distinct anæmic murmur extending upwards; the lungs were normal. At this stage of the examination the patient mentioned very quietly that she thought she was troubled with piles. On examining, I found one large fold of integument on the posterior edge of the anus. Drawing down the nodule gently with my two thumbs brought to view an old fissure extending high up into the rectum and connected with a transverse ulcer within.

Treatment.—In the treatment of anal fissure, like all other diseases, the great object sought is to remove the predisposing cause of the malady; if that can be reached, the healing of the sore soon follows. Different plans of treatment recommended are, stretching of the sphincter muscle by the thumbs or fingers in the rectum; cutting through, or partially through, to the base of the ulcer; cauterizing the fissure with a solid stick of nitrate of silver or using the silver in solution; entire division of the sphincter ani muscle, a procedure recommended by the French. Most American surgeons are in favor of stretching the sphincter, thus paralyzing the muscle, and, by the absolute rest thus secured, giving relief from pain and allowing the ulcer to heal.

In the acute case, the first reported, a suppository was ordered, as follows: ℞ Morphiæ sulph. gr. ss.; ext. belladonnæ, gr. j.; ol. theobrom. q. s. M. et ft. unum suppositorium. One or two of such, as required, were used each day for seven weeks. The patient was made comfortable, declined other treatment, and perfectly recovered.

In the second case, after using the suppositories for a few days, divulsion was performed, and rapid recovery followed.

DISCUSSION.

Dr. A. Van Derveer had seen a fair number of cases, and had been much interested in the paper. He considered the plate of Bodenheim as not quite accurate; the nipple-like projection there represented is not found in every case, only in those with complications. The pain in these cases is exquisite, and oftentimes is allowed to interfere with a thorough examination. This should not be; a careful examination is necessary; the feel of the anus is diagnostic. Cosmoline or cocoa-butter is better than oil, for by

its use the pain is less. The introduction of the finger into the anus is attended with some difficulty, as the ring contracts firmly. The finger alone in diagnosis is not always reliable, while the use of the glass speculum with the fenestra is barbarous. The bivalve speculum is good; so is the four-ring Shiland speculum. In the treatment of these cases it is important to know how far up the fissure extends. His experience was that Van Buren's method with the thumbs, or any other method, unless followed by the rectal plug, is attended with very little success. The best shape for the plug he believed to be ovoid, and it should have a piece across to prevent its entering too far and also to assist in fastening it. Scraping with a curette and inserting a plug, to be worn for an hour morning and night, produces a broad cicatrix, and is generally followed by good results.

Dr. R. H. SABIN, of West Troy, spoke of the immediate relief from pain sometimes produced by the operation of rapid divulsion. A patient of his was seen who was at the time suffering excruciating pain. Thinking there might be an abscess in the neighborhood of the rectum, made an examination, but found none. Introducing his finger well covered with lard, he found the cause of the pain in a fissure of the anus, the exact site of which he located. Introducing both thumbs, he stretched the parts freely, and immediately the pain was gone. In another case he introduced a speculum and cut down upon the fissure; the relief to pain was not so immediate, but the fissure healed kindly, and the patient had no more trouble.

Dr. P. J. KEEGAN had seen four cases. He considered the bivalve steel speculum better than the wire, as it gives less pain, it is smaller, and we can locate the fissure quite as well. The moment the speculum is introduced, open it a very little at first, and, in withdrawing it, close it gradually, but fully; this he has found to be a method attended with a minimum of pain. Having located the fissure, stretch it and cauterize it with carbolic acid; this plan he considered better than cutting or scraping. In one of his cases, after stretching, he touched the fissure every two days with carbolic acid; after six weeks the patient was entirely well, and was suffering no pain. In another case, the result of a fistula treated with the rubber band, he pursued a similar course, and after three months the patient reported that he had continued well. This patient had such severe pain that he could not follow with his mind ordinary conversation. At the second examination he tried the wire speculum; the patient bore it that time, but would never submit to it again, preferring the bivalve.

Dr. F. TOWNSEND, Jr., thought the plug unnecessary; it is objectionable, for when the desire for defecation comes the plug must be removed; it is especially objectionable in women. If the incision is deep enough to sever either pudic or sacral nerve, physiological rest is produced, and this is enough. To obtain good results it is essential that the incision pass at right angles through the fibres. Allingham cites cases which would not get well under any form of treatment. In such cases suppositories are of value.

STRANGULATED HERNIA.*

BY JAMES CHAPMAN, M.D., MEDINA, ORLEANS CO., N. Y.

CASE I. was that of a man 83 years of age, who for forty years had right inguinal hernia, which he had never been able to wholly reduce, and the existence of which was unknown to any of his relatives. It became strangulated while he was picking fruit in a high tree. The usual symptoms of strangulation were severe. About twenty-four hours after the accident Dr. C. performed herniotomy. The operation was difficult, as the adhesions were firm. The knuckle of intestine occupied the outer half of the sac, the inner half being filled with omentum. About the fourth day after the operation gas began to pass by the bowels, and on the eighth day there was a free natural evacuation. In three weeks more the wound was healed.

CASE II.—A man 70 years of age had an oblique inguinal hernia for many years, and had worn a truss, but not constantly. August 13 his hernia came down, and he was unable to replace it. Called in two neighboring physicians, who likewise were unsuccessful. Dr. C. first saw him at noon on the 16th. Had vomited at intervals for about sixty hours. The hernia reached downward into the scrotum, and was tense and painful, and had no impulse on coughing. The doctor proceeded to operate. On gently drawing the coil of intestine out of the scrotum it was found to be of a brownish-red color, but smooth and glossy. It was at once replaced, and the patient recovered.

CASE III.—A woman of 65, in impaired health, had an old femoral hernia of the right side, which suddenly became strangulated. Some years before had been stricken with hemiplegia and loss of consciousness; also, two or three years later, a second similar seizure. The doctor saw her five days after strangulation. The tumor was small, round, tense and tender, and without impulse on coughing. Five days of continual suffering had well nigh exhausted her feeble strength. The doctor proceeded to operate at once. The hernia was an entero-epiplocele. The knuckle of intestine was of a dark-crimson color, but smooth and shining, although somewhat adherent to the sac. Two days

* Report of a paper read before the Medical Association of Central New York, at Rochester, Tuesday, May, 20, 1884.

after operation she became hemiplegic, and succumbed in twelve days. Her bowels moved naturally on the second day, and while she lived there was little or no evidence of peritonitis.

Case IV.—A woman of 63 had been operated upon two days previously by another physician, who upon cutting down to the sac felt it recede with a gurgling sound, and supposed he had reduced the hernia without opening the sac. When Dr. C. saw her, the symptoms were very serious. He opened the incision formerly made with his fingers and the handle of the scalpel, and finished the operation. The hernia was an old oblique inguinal, the intestine verging on blackness, but tense, elastic and well filled out. Believing the abdomen the best place for the bowels under any circumstances, the doctor replaced them, but the patient died six hours after the operation.

Case V.—A man aged 60 had an old inguinal hernia of the incomplete variety, for which he wore a hard, ill-fitting truss. Strangulation had existed several days. The centre of the tumor, over the intestinal ring, was hard and fluctuating to the touch. The skin over a large surface was red, hot and œdematous. The tumor appeared on the point of bursting, and the doctor declined to operate. Vomiting was nearly incessant, and the pulse and facial expression seemed to indicate that collapse was not far off. The bursting of the tumor was not long delayed. At first there was a discharge of pus and then semi-liquid feces. His condition now improved at once. The stercoraceous fistula remained open for a time, but with steadily diminishing feculency as the function of the lower bowel was restored. Nature effected a cure.

Dilatation for Fissure of the Anus.—This method is discussed at some length in the *Revue de Therap.*, for February, 1884. Gradual dilatation is not recommended by the authors, but forced and rapid dilatation is said to give excellent results. The index finger may be used for the purpose, but the thumbs are generally too short. Moliere, Verneuil, Trelut, and others, make use of expanding specula of various forms. An enema must be given on the day before the operation, and the administration of an anæsthetic is generally advisable. The dilatation is known to have been sufficient when two fingers can be introduced together into the rectum without feeling of resistence. The patient can resume his occupation after two days. Incontinence of fæces does not occur after rapid dilatation.—*Med. and Surg. Rep.*

A CASE OF PURPURA HEMORRHAGICA, PRESENTING STRANGE PECULIARITIES AND A RAPIDLY FATAL TERMINATION.

BY G. P. K. POMEROY, M.D., A. M. C., '78, STUYVESANT, N. Y.

[FOR THE MEDICAL ANNALS.]

On Tuesday, April 29, 1884, while in attendance on M. L. G., my attention was called to his daughter, a Miss of thirteen years, whom I found suffering from an attack of acute tonsilitis. At the same time I noticed a limited number of varicella crusts about the neck and face. There was a slight elevation of temperature, and she complained of a trifling pain in the head, back and legs. These I simply ascribed to the tonsilitis, and prescribed the simple treatment of a laxative, with warm poultices and gargles, the same as she had used on a number of previous occasions, and thought nothing more of the case. On Thursday, two days later, at about eight o'clock in the evening, I was summoned in haste. I responded immediately, and on reaching the house I found the patient complaining of slight pain in the knee joints. Upon examination I found the lower extremities below the knees very cold, much swollen and the left one covered with dark purple spots. There was no tenderness, and manipulation did not increase the pain in the joints. I immediately ordered a hot mustard bath, but she could not bear the water of more than blood warmth, as she said that it burned her. After the bath I bandaged the legs with flannel and applied bottles of hot water to the extremities. Temperature normal; pulse 120 and quite weak. Ordered stimulants and administered sulph. quinia and tr. mur. iron. Called again early the next morning, and found the swelling much increased and both legs covered with the purple spots, also slight hemorrhage from the nose and mouth. Temperature depressed four-fifths of a degree; pulse 130 and still weaker. Continued treatment, with addition of fl. ext. ergot. Visited the patient again about four o'clock in the afternoon in company with Dr. Woodworth. Found all the symptoms aggravated. The whole cutaneous surface below the knees was of a dark purple or black color and covered with large serous vesicles that would rupture from the slightest touch. Pulse rapid, small and flickering, indicative of

great prostration. Surface of body covered with cold perspiration. Increased the amount of stimulants and tonics. Saw her again at about nine o'clock in the evening. Discoloration had extended a little above the knees. Pulse some steadier and less rapid, with a little more warmth about the surface of the body. Patient said she felt better. Ordered treatment to be continued, told the parents that the symptoms were a trifle more favorable, and returned home. When I called in the morning, the mother informed me that about two hours after my previous visit the patient began to sink rapidly, and, notwithstanding the great amount of stimulants used, she failed to rally, and died about two o'clock, or five hours from my last visit.

The peculiarities of this particular case were: No hemorrhagic spots over any part of the body but the lower extremities. No elevation of temperature from the onset; in fact, depression almost from the first. The great amount of swelling with so little pain. The great number of serous vesicles, and only over the discolored surface, and so easily ruptured. The character of the discoloration, being dark purple from the start, and not the red, becoming darker, as in typical cases. The manner of extension of the discoloration in the latter stages of the disease, being like that of erysipelas, and not the coalescing of the purple spots. The whole surface being covered, and not the distinct petechiæ or vibices throughout, as is usual. And, lastly, the rapidly fatal termination with so little hemorrhage.

From what knowledge I have and can gain from literature on the subject I have failed to discover an analogous case — that is, one presenting the same train of unusual symptoms. As to a correct diagnosis of the case, I think there can be no question, as the initiatory symptoms of the purple spots, with the hemorrhage from the mucous surfaces, although very small in amount, were as in typical cases.

This paper is respectfully submitted to the profession, hoping it may lead to the bringing out of some more interesting facts concerning a disease of which there is so little known in reference to causation and pathology and necessarily of the treatment itself.

RABIES.—M. Pasteur can now test his theories. An employè of Paris and Lyons Railway, at Tarasconsur-Rhone, has been bitten by an undoubtedly mad dog, and placed himself in Pasteur's care.

REMOVAL OF NASAL POLYPI.*

BY D. FLEISCHMAN, M.D., A. M. C., '81, ALBANY.

I intend in this brief paper to speak of the methods of treatment of nasal polypi, of the question of recurrence, and to give the results of my limited experience.

Of the various modes of operating upon nasal polypi, that by forceps has been at times the exclusive method, and to-day is certainly the most generally practiced; and yet it seems to me at once harsh, unsurgical and inefficient. The introduction and manipulation of the forceps causes pain; the attempts, successful or not, to grasp the growth, lacerate the mucous membrane, and hemorrhage, often severe, results. It is almost impossible in many cases to grasp the pedicle of the tumor when situated beneath the turbinated bones; and even under the most favorable circumstances of good illumination the forceps operation is too often a blind attempt in sensitive cavities to extract whatever the jaws of the forceps may seize. Dr. Thudichum mentions cases "where severe permanent injuries have followed their use; *e. g.*, partial or entire closure of a nostril, membranous adhesion between turbinated bone and septum, dislocation of turbinated bone, fracture of septum, etc."

Injection into the substance of the growths of acetic acid, corrosive sublimate, tincture of iodine, alcohol, etc., has been practiced; but the long continuance of the treatment, because but few polypi can be treated at any time, the unpleasant odor and discharge during the period of sloughing, the inefficiency of the method, because of the impossibility of destroying the pedicle of the polypi, together with the pain, render this mode objectionable. The application of various astringents can have but little effect upon the growths, whatever it may have upon an attendant catarrhal condition.

The cold-wire snare, of which class Jarvis' ecraseur is the best, simpler, more effective and free from the inflammatory reaction which often attends the galvano-cautery loop, gives the best results in the removal of nasal polypi. The loop is made to encircle the polyp (the cavity being brightly illuminated), is car-

* Read before the Medical Society of the County of Albany, Wednesday evening, April 23, 1884.

ried to its point of origin, the sliding tube is drawn down, the milled nut is turned, and the growth is removed, usually adhering to the end of the instrument. The advantages of the snare are, comparative painlessness, trifling hemorrhage, the operation can be repeated again and again, and, above all, its efficiency. Cauterizing the part from which the polypus has been removed with nitric or acetic acid seems judicious in many, though not in all, instances. As to removing a portion of the turbinated bone, I will quote from Stoerck:* "An excuse for this has, indeed, been sought in the circumstance that unless the polyp with its root were removed it would certainly recur. There would be nothing to oppose to this, because previously it was impossible to see how far the polyp was situated upon the turbinated bone, and on that account it easily happened that the operator, in order to be thorough, extirpated, together with the root of the polyp, the entire substratum. That Pirogoff directly advises in extirpating polypi the breaking off of the turbinated bone, in order to make the operation radical as far as possible, will incite no surgeon to imitation. But also from a purely surgico-technical standpoint much can be advanced against the proceeding, for it is not immaterial whether we remove a portion of a person's mucous membrane or a piece of ethmoid bone. The extraction of a polyp, if the bone is uninjured, cannot possibly cause a meningitis; whereas it is notorious that the fracture of the ethmoid can cause an inflammation of the same, and progressively an inflammation extending to the base of the brain."

As to recurrence, it is impossible to speak positively in every case. Bosworth says (*Med. Record*, Jan., 1883): "Of the thirty-five cases referred to" (operated upon during the previous year) "there has been but one of recurrence. This was a patient whose turbinated bone had been much torn and mutilated by the forceps. It is too early, perhaps, to assert that the other cases are cured. Many of them I have examined since operating and found no evidence of disease. Others were patients at my clinics, of whom I lost sight. I believe, however, that I am perfectly justified in claiming a large percentage of cures by the method described."

I believe that recurrence will not necessarily be manifested within a year after operating. In one of my cases there was no

* Klinik der Krankheiten des Kehlkopfs, der Nase und des Rachens. Stuttgart, 1876.

recurrence until eleven months. The more thoroughly the operation is performed the more favorable the prognosis. It may be that there will be an occurrence of polypi after a most thorough operation, and still this need not be a recurrence; for they may have been only embryonic polypi which were too small to be perceived at the time of the first operation, and which, with their natural tendency and aided, perhaps, by the removal of the other growths, giving them space to grow, have since appeared. It seems to me most advisable to extend the operation over a number of sittings, and to keep the patient under observation, and remove new growths as they appear. Some cases of polypi are attended by a condition of nasal catarrh, but the fact of causation or mutual dependence is not established. The polypus probably takes its origin from some point of inflammation, and after-treatment to correct catarrhal or other abnormal conditions is advisable.

Concerning recurrence, I quote at some length from Zuckerkandt (Normale und Patholog. Anat., der Nasenhöhle und ihrer Pneumatische Anhaüge, von Dr. E. Zuckerkandl. Wien, 1882): "To the circumstance that polypi develop in a condition of such a depth as the infundibulum I attach especial importance, on account of its influence upon the extirpation of these tumors. It is known that nasal polypi frequently recur and that this phenomenon cannot always be traced to one and the same cause. It is easy to overlook small concealed polypi whereas we remove the large ones, and regard the tumor, having duly increased in size in a shorter or longer time, as a recurrence of the presumably not thoroughly extirpated polypus, or actually the tumor has not been removed by the root.

"Voltolini writes with reference to this: 'Success may be expected if we can in every case reach the root of the polypus; in this impossibility of being able always to reach the root of the polyp lies the possibility of a recurrence with every operative procedure.'

"I will now attempt from the point of view of this dictum to review my cases. As to those tumors originating from the borders of the middle turbinated bone or upon the edges of the hiatus semilunaris, I will admit that the surgeon can reach the insertion of the pedicle, and that a radical removal of the tumor is possible, although this will not be easy for the broad pedunculated polypi. I will further admit that we can grasp

the base of polyps originating from the angular boundaries of the superior meatus. On the other hand, in the case of those polypi which grow out of the depth of the infundibulum, at the ostium frontale, maxillare or ethmoilale, or from the fundus of the superior meatus, to operate by forceps or with the snare, and thereby think it possible to ecraseur the polyp, would be folly. With polyps of this kind a portion of the pedicle always remains behind. At best, it is possible to reach with the snare the borders of the hiatus semiiunaris or of the superior meatus, and there to remove the growth; but that part of the pedicle which arises above these boundaries, in the depth of the furrows, always remains behind; and, therefore, with polyps inserted in this manner, the cause of a recurrence is renewed after each operation. The radical excision of such polypi, is, according to my idea, possible only if the recess in which the pedicle is situated is exposed, unless it would be possible with the aid of rhinoscopy to penetrate into the furrows and there destroy the remnant of the tumor. At all events, I believe that, as regards this kind of tumors, more can be accomplished with the forceps than with the snare."

Case I.—Mr. B., of Cherry Valley, aged about 35. Patient's nose was first occluded six years ago. Three month's later he was operated upon for the first time. During the following two years he sustained several operations. Four years ago he was operated upon twice in close succession, and the nose was free for one day, the previous operations not even having afforded any relief. During the past three years a number of operations were performed, but the nasal cavity was never freed. He states that hemorrhage was often quite severe, and on one occasion continued, intermittingly severe, for twenty-four hours. I first saw the patient December 16, 1882. In addition to the nasal polypi, there were present chronic catarrhal pharyngitis, laryngitis, bronchitis and spasmodic asthma of three years' duration. The patient was weak and nervous, and, as he could remain in the city but a few days, the removal, in two sittings, of a portion only of the growths was possible. I used the Jarvis snare in this and the following cases. In the following six weeks the patient gained six pounds in weight, his asthmatic attacks became less severe and less frequent, and his nasal condition was comfortable. He visited me July 4, 1883, when I removed a few growths. April, 1884, the patient states that his nose has

been free since the last operation, and that he has had but one and that a slight attack of asthma during the winter. Removed a number of polypi, completely freeing both nostrils.

Case II.—Mr. C., aged 33. In this case the polypi appeared suddenly about four and a half years ago, and were attributed by him to a violent blow upon the nose with a base-ball. He was operated upon shortly afterwards, with slight relief for three months, after which the condition was in no wise ameliorated. Four years ago he was operated upon once, and three years ago three times within eight months, being anæsthetized each time, but the troublesome condition was not improved to any extent. An attempt was made, too, to inject the growths with acetic acid, but, after two trials, was abandoned. Two years ago he was operated upon twice, but with no relief. I operated upon the patient, removing the growths in a number of sittings extending over a period of two weeks, beginning April 5, 1883. Mr. C. continued under observation for a few months. He remained comfortable, said he had "the best nose he ever had," and when I sent for him two weeks ago to be examined, he believed that there had been no recurrence. Upon examination I found but three very small growths, which I removed. At the first operation the two largest of the growths which are seen in the vial containing the polypi of this patient completely occluded the left posterior naris. They were removed together, and furnished the only instance of a hemorrhage of any account in any of the cases. The hemorrhage was quite troublesome, but yielded to simple measures. He states that as great and greater hemorrhages were not unusual with his previous operations by forceps.

Case III.—Mr. B., Albion, N. Y., aged 47. Duration of difficulty twelve years. Mr. B. has had six operations previous to last April, the first of which was performed ten years ago and the last three months before I saw him. He states that none of these were satisfactory, never freeing the nose. I operated upon the patient in a number of sittings during the fortnight following April 12, 1883. An earlier departure from the city than was anticipated was necessary, and after-treatment, which was essential on account of a catarrhal condition, was rendered impossible. Under date of March 28, 1884, Mr. B. writes that "the right nostril is free and clear, and I think there is a very little in the left."

CASE IV.—Mr. McK., Rochester, N. Y., aged about 30. Has been troubled with nasal polypi for a number of years, and dates their occurrence to a severe coryza engendered by exposure on the Mississippi river. But one attempt at an operation had been made, and that was unsuccessful in removing any thing. The patient was very nervous, and, as he expected to remain in the city for some time, I operated once a week, removing a few polypi at a time, beginning September 23, 1883. The cavities were completely free December 6, the sittings having been interrupted by a severe attack of tonsillitis. He was compelled to leave the city suddenly on account of the death of a near relative. About six weeks after his departure he consulted Dr. Roe, of Rochester, for a laryngitis, and afterwards wrote to me that there was no trace of a recurrence of the polypi.

CASE V.—Mr. S., of Cobleskill, aged 40. Nasal polypi were diagnosed a number of years ago, but were never operated upon. He came to my office April 3, 1884, and, as he could spend but a few days away from home, I removed the growths in two sittings.

P. S.—CASE VI.—The following case has come under observation since writing the above: Dr. O., dentist, aged 49, has been attacked every summer since 1876 with hay fever. Examination, August 9, revealed nasal polypi and hypertrophy of the mucous membrane of the inferior turbinated bones. Removal of the abnormal condition was effected, with what influence upon the hay fever it is too early to say.

DISCUSSION.

Dr. H. V. HULL, to illustrate the advance made in surgical instrument manufacture, exhibited a forceps designed for use in removing polypi from the posterior nares; large and powerful, they were calculated to do much damage to the mucous membrane. He contrasted this instrument with the Jarvis snare. He also exhibited a set of fixation needles and tenaculum, and demonstrated their use in aiding to place the snare about the polypus in different cases. He called attention to a case in his practice of very large nasal polypus, visible at the anterior nares, but which depended fully one-half inch below the velum palati. It proved impossible to encircle it with the snare, and he was obliged to remove it piecemeal. While it is essential to remove all of the growth, it is often a very difficult task, on account of the hypertrophied mucous membrane. He had found that by encircling as much of this as possible, then introducing fixation needles above and encircling these, he was enabled to make very thorough removal. Hemorrhage may be modified by making slow traction. His cases had been treated with topical applications of acetic, glacial acetic or chromic acids.

Dr. D. H. Cook inquired if the author of the paper was accustomed to resort to any treatment to prevent a return of the growth. He made the inquiry because, in his gynæcological practice, he had found that after removing uterine polypi advantage was gained by thoroughly curetting the mucous surface and cauterizing with nitric acid.

Dr. Fleischman: As to recurrence, the most effective prophylaxis is a thorough removal and cauterization of the place of origin of the growth. An attendant abnormal condition of the nasal mucous membrane should be remedied.

Dr. Fleischman exhibited a bent Jarvis snare with a myxo fibroma attached, and gave the following history: Master J. G., aged 15, presented a condition of hypertrophy of the mucous membrane of the middle and inferior turbinated bones of both sides, and, in the naso-pharynx, a growth which had completely prevented respiration through the left nostril for three years, and which was also partially occluding the right posterior naris. The wire loop was made to pass through the left nostril and encircle the growth at about its centre. As the nut was turned the instrument, which was new, began to bend and break, and it was impossible to turn the nut further. Traction was made, and succeeded in removing the growth intact, with its long pedicle. Hemorrhage was inconsiderable.

Dr. Hull suggested that to prevent the snare from giving way it was well to have the end of the German silver snare made of steel.

RELATIVE FREQUENCY OF FOREIGN BODIES ON CORNEA OR CONJUNCTIVA OF RIGHT AND LEFT EYES.

BY T. F. C. VAN ALLEN, M.D., A. M. C., '82, ALBANY.

[FOR THE MEDICAL ANNALS.]

There is no denying that statistics which are of no practical importance are still of great professional interest.

To settle a dispute as to which eye was more frequently afflicted by foreign bodies, I, about a year ago, made a synopsis of the cases I had recorded. The result as below:

Right Eye	198
Left Eye	186
Not stated	43
Total	427

In my experience a statement of 1,000 cases would show about 500 of each.

As it is not customary to record these cases very carefully, these figures may interest some surgeons.

ABSTRACTA.

NASAL POLYPI.—Dr. William Ralph Bell (*Canada Medical Record*) describes a new, painless and simple method of removing nasal polypi. His patient is instructed to blow strongly through the affected nostril while he closes the other with his finger. This brings the polypus down so it can be seen. He then injects into the tumor with a hypodermic syringe fifteen or twenty minims of a solution of tannic acid in water, twenty grains to the fluid drachm. In a few days the tumor shrivels, dries up, and comes away without trouble or pain, the patient usually removing it with the fingers or by blowing the nose.

NASAL POLYPUS.—Dr. Richardson, in the *Asclepiad*, recommends the use of sodium ethylate in the treatment of nasal polypus. The caustic agent is applied by means of a probe made of soft cotton-wool twisted into shape on the point of a pair of forceps. This cotton probe is saturated with the ethylate and then plunged into the substance of the polypus. On removing the cotton it commonly happens that the patient can expel the whole mass of destroyed polypus, in a semi-fluid form, by blowing the nose sharply. A second application ought to be made with a view of destroying the base of the polypus. The mode of action is said to be sufficiently clear. The ethylate is decomposed by contact with the water of the polypus into caustic soda and alcohol; the latter coagulates the albuminoids and the former acts as a powerful caustic. With the exception of some burning pain no unpleasant effects seem to follow the use of this method.

THE THERMO-CAUTERY IN THE TREATMENT OF ANAL FISTULE.—Dr. E. Farcy recommends the thermo-cautery in the treatment of fistula in ano, and draws the following conclusions as to its advantages:

1. The operation is rapidly performed, and several fistulous tracts may be operated at the same time.

2. Chloroform is unnecessary, and there is no danger of primary nor secondary hemorrhage, as by other methods.

3. By this method the vitality of the tissues is excited, and there is only moderate suppuration. The wound is protected from the direct influence of the air before granulation sets in.

4. There is no fever, no erysipelas, no phlegmons nor purulent infection, no relapse, and the cicatrix is linear. It is, therefore, the best method for operating in these cases.—*Medical News.*

THE MEDICAL ANNALS:

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EDITORIAL COMMITTEE:

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A SANITARY NEED IN THE CITY OF ALBANY.

Complaints from different localities in Albany concerning the unwholesome air which Albanians are at times compelled to breathe, and the receipt at the same time of the report of what has been done in Paris through the Waring System of Sanitation, have led to reflections on the unhealthful environment of our homes; on the stagnation in the matter of thorough sanitary reform which has characterized official circles, with incompetent and inefficient deputies, in former years; and on the retrograde metamorphosis of physical condition which results therefrom to our fellow-citizens, which many wrongly attribute to the "climate" of Albany.

The design of the system put in practice by Col. George E. Waring, of Rhode Island, is to convey sewage from *every* house in a neighborhood, by water-trapped air-tight pipes, with a constant gradual inclination, *through any distance* required, either above or under ground, to reach a proper sewer. It is a method for "branch drains" and "drains in common." In the city of Albany it is to the radical defects in our branch drains and drains in common that many cases of preventable disease can be traced; it is to our untrapped privy vaults, equivalent to open sewers, that the pallor and anæmia, the headaches, nausea and "biliousness" and the various nervous troubles of city children and adults are largely due. We citizens in Albany die by inches for want of wholesome, uncontaminated air to breathe.

In many dwellings in Albany's best avenues pure air cannot be introduced by any device, except at intervals only; with the wind in certain directions, the windows must all be closed

tight to exclude the sickening and unwholesome exhalations which the wind conveys through the sewer, through the branch drain, through the empty (*but not therefore sanitary*) privy vault of our neighbor, into our parlors and bed-rooms. In close summer nights it is insanitary to have our bed-room windows shut; it is often insane to have them open.

It is not only the detestable nuisance of rank odors from which we suffer, but, in the absence of such, the more faintly odorous sewer-gas, rising from older putrefactions in drain and vault, dynamized and virulent, is wafted from privy throats to infect with its subtle venom the air which citizens, *nolens volens, must* breathe.

Of what value is perfect, air-tight plumbing in any house while a neighbor sports a spouting well of sewer poison?

Sewers not only exhale their normal poison, but are also the distributing allies of epidemics, bringing disease germs from unknown centres; therefore, sewers should not be allowed to "breathe" at the surface of the ground under our noses, even at a street corner, but above our housetops, as do the chimneys from our stoves, where the gases will expand further away from us, instead of rising, as now, toward us and into our rooms.

"Fresh air" in our houses may be made to mean *pure* air — very nearly as pure as in the free fields of the country; but this can never be permanently the case while our neighbors are allowed to have open, wind-swept privy vaults. A "U" trap in every branch drain would stop this draught; but, even then, the privy vault is disease-exhaling.

The Waring system takes cognizance of the fact that it is not recent fæces that are most malignant, but fermenting and putrefied sewage. To keep soil pipes free from this infecting material, this system uses branch-drain pipes of small diameter; the waste water from each house will then be sufficient to flush and scour each drain, as well as each closet. But the question as to narrowness of the calibre of waste pipes is not so important to us as the abolition of our neighbor's open vault and the institution of *trapped water-closets only*, properly ventilated, whether indoors or outdoors, for *every* house, and a tight drain of glazed tile or iron pipe.

These simple sanitary measures should be applied to every house in Albany as well as in Paris. Similar work has already been done in some localities in the United States. The Waring

system has been adopted by Memphis, Omaha, Norfolk, Kalamazoo, Keene, Pittsfield, Buffalo and Birmingham (Ala.). Such changes could be accomplished gradually; starting from a given centre, let the change be made — and made not only in law, but really made in fact — on all premises within a radius of say a quarter or half a mile in the first year, and extend progressively year by year.

The late Dr. Elisha Harris, the veteran sanitarian, was the motor-cause of the existence of fifty thousand windows placed in dark bed-rooms in New York city. But what are windows without pure air?

What sanitary official in Albany will add lustre to his own name, and add years to the the lives of his fellow-men, by following the proper legal steps which shall so eventuate that no untrapped privies shall exist here to befoul the "fresh" air that our citizens must admit through their windows? L. H.

——The New York Medical Journal speaks of the vice-president's address delivered by Dr. H. V. Hull before the Schenectady County Medical Society, and printed in The Medical Annals for August, 1884, as "exceedingly interesting," and reprints a large portion of it in its issue of August 30, 1884.

MEDICAL NEWS.

ALBANY MEDICAL COLLEGE.

The amphitheatre of the Medical College was filled at noon yesterday [Tuesday, September 9] with representatives of the profession, citizens and students, who assembled to witness the opening of the fifty-fourth session. During the morning the grounds in front of the college buildings presented a lively appearance as the students gathered to greet each other and exchange opinions on the hot weather. The genial janitor was kept busy pointing out the many improvements made since last term, to each new group of arrivals, all of whom were glad to hear that "the Boom" was likely to continue. When the exercises opened the students quickly filled all available seats, and greeted the faculty with a round of cheers. President Parker, of the Board of Trustees, presided, and Rev. Dr. Ecob, offered prayer.

The opening address by Prof. Balch had for its subject "What to Study, and How to Study." It was a forcible and logical address, well suited to the needs of the students, full of sound advice and aptly illustrated. That it was well received was more than evident from the storm of applause that followed.

Dr. Tucker, the college Registrar, closed the exercises by making the usual announcements. The first lecture of the course will be delivered at nine o'clock to-morrow morning by Dr. Albert Van Derveer, professor of surgery.—*Albany Argus*, September 10.

The new chemical laboratory, work upon which was begun last spring, has just been completed, at a cost of about three thousand dollars. It is a two-story building of brick, upon the old site, corresponding in style with the main structure, and furnished with every facility for use as a working laboratory. The floors are of Georgia pine; ceilings of spruce, shellacked, and the walls whitened. The rooms are well lighted, and much attention has been paid to the drainage and the convenient arrangement of the gas supply and plumbing. Ogden & Wright were the architects, and the mason work was done by Carr & Burdick, carpenter work by P. McCann, painting by Bantham Bros., gas fitting by Patterson, Smith & Co., plumbing by Ridgway & Russ, and the roofing by Wasson & Martin.

For each of the last three years external additions and alterations have been made to the college buildings. The chemical department is now provided with every requisite for the illustration of the lectures and the use of the classes in practical chemistry.

During the past summer the preparations in the college museums have been rearranged and re-classified and put in complete order. Many dry specimens have been re-mounted and several hundred wet specimens re-immersed in Whitall, Tatum & Co.'s museum jars, in new alcohol or preservative fluid. The work has been done by A. H. Hoadley, a student of the college, under direction of a faculty committee consisting of Professors Ward and Hailes.

The college has recently purchased the anatomical specimens belonging to the late Dr. Henry R. Haskins (A. M. C., '61), for many years demonstrator and later professor of anatomy, from the executors of his estate. These have been placed in the lower museum, and are a valuable addition to the college collections. W. G. T.

NEW YORK STATE BOARD OF PHARMACY.

The members of the Board of Pharmacy, appointed under the new law to establish a State Board of Pharmacy and regulate the practice of pharmacy in the State of New York, met on September 2, at 12 M., in the Albany College of Pharmacy. The drawing of

lots for terms of service resulted in Clark Z. Otis, Binghamton, being selected to serve on the board for one year; J. Hungerford Smith, Ausable Forks, two years; C. H. Haskin, Rochester, three years; A. B. Huested, Albany, four years; and E. S. Dawson, Jr., Syracuse, five years.

An organization was effected by the election of Dr. Huested, president; E. S. Dawson, Jr., secretary; and C. Z. Otis, treasurer. The Board held three sessions on the 2d and one on the 3d of September. It is the intention to accomplish the registration as speedily and with as little ceremony as is consistent, and to this end the secretary will immediately send out to all druggists in business on their own account, whose names can be obtained, a copy of the law, blank applications and explanatory circular. It is designed that these blanks are to be filled out, verified and returned with the fee to the secretary as soon as possible, when the Board will pass upon the applications and grant licenses to all entitled to them. Registration can be done by mail. Should there be those who are by the law entitled to register and do not receive the blanks, they can be had by applying to the secretary of the Board. Two forms of application blanks will be issued; one for those in business on their own account at the time of the passage of the Act (May 24, 1884), and the other, for all others entitled to register, and those applying for examination.

The Board is of the opinion that the law requires the presence of a licensed pharmacist in every store where the practice of pharmacy is carried on, and also that the practice of pharmacy includes the preservation, preparation, mixing or compounding of all articles to be used as medicine, the compounding or filling of prescriptions and the dispensing of poisons.

It is expected that a special meeting of the Board will be held in Syracuse about the 1st of October, and possibly another before the regular meeting, which occurs on the first Tuesday in December, and has been appointed at Albany.

Examinations to grant licenses may be held in Syracuse at the October meeting if insisted upon by any number of applicants, provided the Board is prepared to conduct them. It is expected that there will be about 2,000 in the State entitled to register under the law, and as all such must make applications within ninety days from September 2, there will be much work that must be done by the Board in that time.

It is the desire of the Board to execute the law with impartial justice and in no spirit of persecution, so that the public may be benefited by being more intelligently served, and the pharmacist stimulated, by the protection afforded, to attain a thorough education for his work. The best results cannot be obtained in a day. The Board asks for the support and sympathy of all pharmacists throughout the state, and promises a faithful and honest work on their part to the end that benefit may accrue to all.

A. B. HUESTED.

THE WILLARD ASYLUM.

Dr. P. M. Wise, first assistant physician at the Willard Asylum for the Insane, has been selected as superintendent of that institution in place of Dr. J. B. Chapin, resigned.

PERSONALS.

Mr. Lawson Tait, F.R.C.S., Eng. and Edin., of Birmingham, England, one of the most eminent of the surgeons of Great Britain, has been in Montreal at the recent meeting of the Canada Medical Association and of the British Association for the Advancement of Science. "An Address on Abdominal Surgery," delivered by him before the Canada Medical Association, August 26, 1884, appears in the September number of *The Canadian Practitioner*, Toronto, and also in the Philadelphia *Medical News*.

Mr. and Mrs. Tait, after visiting Niagara Falls in their tour of this country, arrived at Albany on Tuesday evening, September 9, as the guests of Dr. Van Derveer and family.

On Wednesday, at St. Peter's Hospital, in the presence of a number of the physicians of the city and the students of the Medical College, Mr. Tait performed hysterectomy for the removal of an ovarian tumor, complicated with a large uterine myoma. The diagnosis was made by Mr. T. before the operation, in a very able manner. On Thursday, at the Albany Hospital, in the presence of a very large medical audience, he removed the ovaries in a case of long suffering from disease of these organs.

On Thursday at two o'clock a very large party of physicians and citizens met Mr. Tait at a luncheon given in honor of our distinguished visitor by Dr. Boyd, at his residence, on State

street. At seven o'clock a dinner party was given by Rev. and Mrs. Wesley R. Davis, at their residence, in Willett street, at which there were present Gov. Cleveland, Mr. Lawson Tait, Dr. Albert Van Derveer, Dr. S. B. Ward, Mr. J. Townsend Lansing and Mr. St. Clair McKelway. In the evening a reception was tendered to Mr. Tait by Dr. Van Derveer, at his residence, in State street. A large concourse of physicians from the city and from the vicinity, and, in addition, the mayor and many citizens assembled to meet our honored guest.

Mr. Tait took the day boat for New York, *en route* to Philadelphia, on Friday, September 12, in which city he will be entertained by the members of the Obstetrical Society. He sails, September 20, for England, on the "Celtic."

His brief visit to Albany leaves a very pleasant and permanent impression.

Dr. Albert Van Derveer, who has just returned from an extended European tour, in an interview says:

We had a very pleasant trip throughout. We left New York on the steamer "Oregon," June 25, and after a magnificent voyage reached Queenstown, July 2. We visited the principal points of interest in England, Ireland and Scotland. I inspected some of the leading hospitals and institutions in the United Kingdom, and also attended a meeting of the British Medical Association held at Belfast in the latter part of July. While in London we visited the principal places of interest and the International Health Exhibition. Among the many historic points of interest in England, we visited the Litchfield Cathedral, Warwick and Kenilworth Castles, Coventry, etc., and the home of Shakespeare at Stratford-on-Avon. I spent most of my time in Birmingham, England, in company with Dr. Lawson Tait, one of the most celebrated surgeons in the world. I inspected the various dispensaries and medical institutions, and can say that they are very fine and complete. After leaving Belfast, Ireland, we proceeded to Copenhagen, Denmark, where I attended the International Medical Congress, which was then in progress. This congress was a grand success, physicians being present from nearly all parts of the world. The attendance numbered 2,000, which far exceeded the expectations of the directors. After a journey through Holland and Belgium, we visited Hanover, Frankfort, Hamburg, Cologne and other cities in Germany. We then left for Paris *via* the river Rhine, greatly enjoying the magnificent scenery. The cholera seems to have driven many Americans out of France. We remained a short time in Paris, visited the public buildings and enjoyed the splendid drives, and made a short trip to Versailles, after which we went to Liverpool and embarked on the steamer "Gallia" for New York, on August 23, arriving here Tuesday morning, September 2. Our return voyage was a tempestuous one.—*Albany Argus.*

Dr. Van Derveer visited Belfast as a member of the British Medical Association, and was sent to Copenhagen as one of the delegates of the Medical Society of the State of New York.

A banquet in honor of Dr. Van Derveer and in congratulation of his return was given at the Windsor, on the evening of Thursday, September 4, by about fifty brother practitioners, at which the doctor gave a brief account of his European visit, dwelling particularly on the abdominal sections performed by Mr. Tait for pyo-salpinx, hydro- and hæmato-salpinx, ovarian tumor, extra-uterine pregnancy, etc., and the low rate of mortality—only two per cent. in his last hundred operations for removal of ovarian tumor. Mr. Tait operates without the use of any antiseptic, paying great attention to cleanliness and drainage.

Dr. Cyrus S. Merrill returned from Europe, September 8, in perfect health, well rested by his brief recess from office business. He reports a delightful trip. He traveled slowly over the familiar territory where he had formerly pursued his studies in ophthalmology and otology, and took great pleasure in the hearty greetings of his old acquaintances, his former chums and professors.

While in London his time was spent largely in the Royal Ophthalmic Hospital. On the continent he visited the universities at Heidelberg, Bonn, Strasburg, coursed up the Rhine, to Switzerland, and thence to Paris.

He spent some time with his friend, Prof. Horner, of Zurich, who, he says, is especially conscientious in his charity work, although generally specialists abroad do not give the close study and care to charity patients that is common here.

Dr. Merrill says of London that it is one of the dirtiest cities in the world. Although the mortality reports indicate that it is a healthy city, yet even in the high-toned West End there is more filth in the streets than in the worst part of Paris.

Paris has been noted in former years for its good general sanitary condition; but this year, on account of the cholera scare, unusual precautions have been taken; official scrutiny extends even to the close inspection of food in the markets.

The cholera scare in Paris was a pure scare. Prof. Galezowski said to the doctor that there had not been a case of Asiatic cholera in Paris; that one man over seventy years old had died of acute cholera morbus, which English newspapers had called Asiatic cholera.

William H. Bailey, M.D., A. M. C., '53, set sail, by the steamer "City of Berlin," August 30, with his wife, for a short tour in Europe. He will pass through England, spend a few days in London, and then join his nephew, Hon. John M. Bailey, consul at Hamburg, who, with his family, has resided there for a few years. In their company northern Europe will be visited, the tour of the Rhine being taken and several days spent in Paris. The entire party have staterooms engaged for their return passage, which will be made about the middle of October. The 'City of Berlin" arrived at Queenstown September 9.

Jacob M. Falk, M.D., A. M. C., '84, of 60 Westerlo street, Albany, sailed from New York, on Saturday, September 6, per steamer General Werder, North German Lloyd line, en route for Vienna, for an extended post-graduate course of study and clinical observation of the eye and ear.

Dr. Hamilton Holliday, '84, Schuylerville, Saratoga Co., N. Y.
Dr. Patrick E. Stafford, '84, 116 Philip street, Albany.
Dr. Charles F. Aldrich, '83, Athol, Warren Co., N. Y.
Dr. W. B. Ambler, '83, New Lebanon, Columbia Co., N. Y.
Dr. Charles Bolz, '83, United States Arsenal, West Troy.
Dr. P. F. Curley, '83, box 383, Newport, R. I.
Dr. William Davis, '83, Gloversville, N. Y.
Dr. F. S. De Lano, '83, Ticonderoga, N. Y.
Dr. R. J. Dimon, '83, Hastings, Oswego Co., N. Y.
Dr. J. G. W. Entwistle, '83, Troy, N. Y.
Dr. W. F. Gardiner, '83, Fort Covington, Frank. Co., N. Y.
Dr. W. St. Clair Gibbs, '83, Hyde Park, Lack. Co., Pa.
Dr. W. D. Hasbrouck, '83, Port Ewen, Ulster Co., N. Y.
Dr. N. E. Heath, '83, 57 Eagle street, Albany.
Dr. H. A. Jendrault, '83, North Adams, Mass.
Dr. F. T. Kunker, '83, Newtonville, Albany Co., N. Y.
Dr. A. M. Leonard, '83, Camden, Oneida Co., N. Y.
Dr. J. D. Le Roy, '83, 2 Park Place, Poughkeepsie, N. Y.
Dr. H. L. Odell, '83, Summit, Schoharie Co., N. Y.
Dr. J. W. Pouchner. '83, North Egremont, Mass.
Dr. W. L. Schutter, '83, 28 North Knox street, Albany.
Dr. I. M. Slingerland, '83, Slingerlands, Albany Co., N. Y.
Dr. F. L. Smith, '83, Sheffield, Mass.
Dr. John H. Stephens, '83, Cedarville, Herkimer Co., N. Y.
Dr. Joseph M. Stone, '83, Ashland, Newago Co., Mich.
Dr. David H. Strachan, '83, Grand Rapids, Mich.

Dr. Maurice Ten Brink, '83, 199 Avenue C., New York.

Dr. Charles F. Wharton, '83, Richmondville, Schoharie Co., N. Y.

Dr. George E. Whipple, '83, Elizabethtown, Essex Co., N. Y.

Corrections of Previous Personals.

Dr. F. D. Morrill, '81, 90 Madison avenue, Albany.

Dr. John F. Reilly, '83, Greenbush, Rensselaer Co., N. Y.

Dr. Jay D. Van Wirt, '83, Canajoharie, N. Y.

Dr. Clinton G. Hickey, '84, has removed from 114 Jefferson street, Albany, and is practicing in Gaylordsville, Litchfield Co., Conn.

Dr. J. A. McCaughin, '84, resident physician, Alms House, Albany.

Dr. Edgar W. Morehouse, '84, Peru, Clinton Co, N. Y.

BIOGRAPHIES.

Dr. John Buskirk Rossman.

Dr. John Buskirk Rossman was born September 27, 1806, in Johnstown, Columbia Co., N. Y. He was the seventh child of a family of sixteen children. Fourteen grew to maturity. Four of the sons were physicians. His father, John I. Rossman was a worthy, upright man, much respected in the community in which he lived. He was elected sheriff of Columbia county for two or three consecutive terms. With a family so large and facilities for education so limited, Mr. Rossman was not able to give his children a liberal education, yet he gave them the best that could be obtained in the schools in his vicinity. John not only attended the district school, but was sent to a neighboring academy, where he acquired commendable proficiency in the higher English branches. He is represented as having been a lad of excellent morals and of studious habits. In order to be able to continue his studies, and also to fix more permanently his elementary education, he taught a district school several winters. He commenced the study of medicine with Dr. T. Broadhead, of Clermont. We are not informed how long he remained in this office, but we next hear of him in the law office of Mr. Killian Miller, in Hudson. He remained here only a short time, law not being congenial to his tastes. He then studied with Dr. Mc-

Clelland. From this office he went to Hudson, in the office of Dr. Samuel White, where he believed he could have better facilities for study and observation. He attended medical lectures at Fairfield, Herkimer Co., N. Y. From this institution he received his degree in 1829. After graduation he returned to Johnstown, his native town, and commenced the practice of his profession. Although young, he was earnest and attended closely to business. His genial manner and sympathetic nature soon gave him practice. His reputation increased, and the young physician was called to longer distances and to families of more importance and of greater intelligence. Previous to this Mr. John Richmond, an English gentleman, had purchased from Mr. Livingston the tract of land called Livingston's manor. Mr. Richmond had taken possession of his purchased property, and to his house Dr. Rossman was called. Here it was that the doctor first met his future wife, Miss Elizabeth Mary Fairbank, the granddaughter of Mr. Richmond and the great-granddaughter of the Earl of Preston. About two years after his marriage Dr. Rossman moved to Richmondville, Schoharie county. He remained there about eight years, when he again changed his residence, and came to Albany. City life is always attractive to a country practitioner, and almost as often as the change is made there is serious disappointment, but with Dr. Rossman it was different. Practice came slowly, but patient waiting and prompt attention to every case secured some business. A few years found him in the midst of a prosperous and lucrative practice. In 1837 he was made a member of the Medical Society of the County of Albany; was elected treasurer in 1849 and again in 1856. He had a reunion with Dr. Thomas Hun and Dr. Charles Devol to celebrate their semi-centennial in practice by the County Medical Society. He was elected alderman from his ward about 1856, which office he filled with credit to himself and satisfaction to his constituents.

Dr. Rossman was an affectionate and kind husband, an indulgent and attentive father and a true and steadfast friend. Like the most of mankind, he had his peculiarities, but these were eccentricities of the head and not of his heart. His wife, Elizabeth Mary Fairbank, died July 27, 1868. She had eight children — four sons and four daughters. Three sons and two daughters are still living. In 1869 he married Miss Rebecca P. McCarthy. By this union he had one son and two daughters, all

of whom are living. Soon after he located in Albany Dr. Rossman joined the Middle Dutch Church, and ever after was a consistent and devoted Christian. The last few years of his life gave decided evidence of increasing age. He continued to grow more and more feeble, until December 23, 1883, when he peacefully and hopefully passed away to receive the reward of a life well spent.

W. H. BAILEY.

JOHN W. MANN, M.D.

John W. Mann, M.D., was born in Berne, Albany Co., N. Y., in 1847. His parents were in straitened circumstances and hardly able to give him the rudiments of a common school education. Born on a farm, so soon as he could render any assistance he was forced to contribute to the family resources; consequently he enjoyed but a few months of attendance at the district school, and was compelled to educate himself in the spare hours not devoted to actual labor. At fourteen years of age he faced the world and commenced to earn his own living. But so eager was his thirst for knowledge that he studied his books "many a night by the aid of a pine-knot" fire. By these efforts he to some extent mastered the four elementary branches of an English education. He was successively a cooper, a dyer and a tanner. In 1870 he came to Albany, and, besides supporting himself, gave liberally towards the education of his sisters. He was married in 1873 to Miss Isabella Clark, who now survives him with their only child, a daughter. In 1873 he was appointed patrolman on the Albany police force. During these years he still cultivated his early habits of study, and while on the force occupied much of the time which should have been devoted to sleep and rest in studying general literature and in the reading of medicine. In 1879 he resigned from the police and took up the business of cracker-baker, which he continued for two years. During this period he studied medicine, attended lectures at the Albany Medical College, graduated in 1882, and engaged in the practice of medicine at No. 67 Hamilton street, Albany, until the time of his death. While attending some scarlet fever patients, he was himself taken sick with the same disease, accompanied with diphtheritic tonsilitis. After apparent improvement, acute desquamative nephritis and secondary pneumonia set in as the result of a cold, and he died March 4, 1884.

From his early manhood he had a predeliction for the profession, and realized one of his greatest aspirations in its attainment. He was very industrious, slow in learning, yet retentive of memory and ready in resource. His success was guaranteed by his increasing practice. He was in every respect an upright, honorable gentleman and a faithful physician. J. M. BIGELOW.

Dr. Charles Platt Staats.

Dr. Charles Platt Staats was born in Albany, August 24, 1831. In 1853 he graduated at the Albany Medical College, and in 1859 he united with the County Society. He served as assistant surgeon of the Sixty-seventh N. Y. Volunteers, until his promotion to the office of surgeon of the Twenty-fifth N. G. S. N. Y., July 2, 1864. After the war he was engaged in the practice of medicine in Albany with his father, Dr. Peter P. Staats, until the latter's death in 1874, but since then his interest has been in the settling of the estate of the late William Taylor. About three years ago he had an apoplectiform attack, apparently embolism of the brain. A recurrence of a similar condition on April 14, 1884, during convalescence from pneumonia, terminated his life on April 16. L. H.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.

Abstract of Minutes of the Stated Meetings of February 27, March 26 and April 23, and of the Semi-Annual Meeting of May 13, 1884.

A regular meeting of the Medical Society of the County of Albany was held in Alumni Hall, Wednesday evening, February 27, 1884.

Present: President H. Bendell and Drs. Bartlett, T. P. Bailey, D. C. Case, Classen, Cook, Culver, Curtis, DuBois, J. D. Featherstonhaugh, Fleischman, L. Hale, Haynes, La Moure, Merrington, J. W. Moore, W. J. Nellis, Riley, Snow, Thompson, Van Slyke, Van Vranken, Ward, Witbeck, Woodward—25.

Minutes of the last regular meeting were read and approved. Reading of the minutes of the special meeting was omitted on motion.

The President, in a few appropriate remarks, referred to the death of Dr. John W. Mann, and appointed the following gentlemen a committee to prepare suitable resolutions: Drs. J. M. Bigelow, U. B. La Moure, C. H. Crawford, T. P. Bailey, W. J. Nellis.

Dr. Bailey, for the committee, reported the following resolutions, which were adopted by a rising vote:

WHEREAS, It has pleased an inscrutable and all-wise Providence to remove from us our professional associate, Dr. James W. Mann; therefore be it

Resolved, That while we bow in humble submission to the divine will, we deplore the loss of one who, having achieved the position he held after great hardship and industry, gave promise of a bright and successful career in his chosen profession.

Resolved, That we tender to the family of the deceased our sympathy in their inexpressible loss, and that these resolutions be spread on the minutes of this Society and a copy of them be transmitted to the family.

The following were proposed for membership: Dr. R. J. Brown, West Albany, by Dr. T. P. Bailey; Dr. J. H. Mitchell, Cohoes, by Dr. W. J. Nellis; Dr. Joseph D. Craig, Albany, by Dr. N. L. Snow. Referred to Board of Censors.

The President then appointed the following Business Committee: Dr. Lorenzo Hale, chairman; Dr. F. C. Curtis; to which are added, *ex officio*, President Bendell, Vice-President Archambeault, Secretary Bartlett.

A paper entitled "School Hygiene" was read by Dr. J. D. Featherstonhaugh, of Cohoes. [See page 225.] Discussed by Prof. E. A. Corbin, of the High School, and by Drs. Lorenzo Hale, President H. Bendell and John Thompson.

Dr. J. W. MOORE, of Cohoes, read a paper on "Diphtheria." [See page 171.] Discussed by Drs. Snow, Cook and Van Vranken.

Dr. JOHN THOMPSON moved thanks of the Society to the readers of the papers. Carried.

Dr. J. W. MOORE moved that when we adjourn it be to have our next meeting in Cohoes. Discussed in favor by Drs. Thompson, D. C. Case, J. D. Featherstonhaugh, Witbeck, Curtis, Van Vranken, Haynes, Ward and Cook. Carried.

The President appointed as a committee to make arrangements for that meeting, Drs. J. W. Moore, J. D. Featherstonhaugh and J. U. Haynes.

Adjourned to partake of a collation at 10:45 P. M.

The regular monthly meeting of the Medical Society of the County of Albany for the month of March was held in the parlors of the Harmony Hotel, Cohoes, N. Y., Wednesday evening, March 26, 1884.

The meeting was called to order by President Bendell.

There were present: President Bendell and Drs. Archambeault, T. P. Bailey, Ball, Bartlett, Boudrias, Boyd, D. C. Case, H. S. Case, Classen, Cook, Crawford, Culver, Curtis, J. D. Featherstonhaugh, Fleischman, William Hailes, Jr., Lorenzo Hale, Haynes, Healey, Keegan, La Moure, M. J. Lewi, Lyon, Mitchell, March, Moore, Morrow, Munson, T. W. Nellis, W. J. Nellis, Peltier, Perry, Samuel Peters, R. H. Sabin, W. B. Sabin, A. Shiland, J. C. Shiland, Snow, Stonehouse, Thompson, Townsend, Van Derveer, Van Slyke, Van Vranken, Ward, Witbeck—47; and, as guests, Dr. Mitchell, of Cohoes; Dr. Stubbs, of Waterford; Dr. Schuyler, of Troy.

The reading of the minutes of the last meeting, was, on motion, dispensed with.

The following propositions for membership were made: Dr. T. F. C. Van Allen, by Dr. E. Van Slyke; Dr. D. P. Shevlin, by Dr. A. Van Derveer. Referred to Board of Censors.

Dr. JOHN THOMPSON, of Albany, then read a paper entitled "Anal Fissure," exhibiting in connection with it some colored illustrations made by Leonard Ochtman, of Albany. [See page 257.] The paper was discussed by Drs. Van Derveer, R. H. Sabin, Keegan and Townsend.

Dr. JNO. BEN. STONEHOUSE said he had prepared a paper for this evening and had it with him, but, owing to the lateness of the hour, he hoped there would be a postponement of its reading until some future meeting.

There being no objection, it was so ordered.

Dr. THOMPSON presented the colored illustrations of the subject of his paper to the Cohoes members of the Society, whose guests we had, for the evening, become. They were received by the chairman of the committee of arrangements, Dr. J. W. Moore, of Cohoes, in an appropriate and pleasing manner.

Dr. C. E. WITBECK proposed the name of Dr. C. C. Schuyler for non-resident membership. Referred to Board of Censors.

Dr. MOORE, before making a motion to adjourn, invited the Society to the dining-room for a supper.

Adjourned.

A regular meeting of the Medical Society of the County of Albany was held in Alumni Hall, Wednesday evening, April 23, 1884.

The meeting was called to order by the Secretary, in the absence of the President.

Dr. D. H. COOK was elected President *pro tem.*

There were present: Drs. Ball, Bartlett, H. S. Case, Cook, Crawford, Culver, DuBois, Fleischman, Hull, Morrow, Murray, W. J. Nellis, Ritzman, Scattergood, Stonehouse, Thompson, Woodward—17.

On motion, the reading of the minutes of the last meeting was dispensed with.

The following propositions for membership were read by the Secretary: Dr. G. S. Knickerbocker, of Albany, by Dr. N. L. Snow; Dr. Edgar C. Hallenbeck, of Bethlehem, by Dr. William H. Bailey.

Dr. JNO. BEN. STONEHOUSE read a paper entitled "Mental Symptoms in Ordinary Disease." Discussed by Drs. Thompson and Hull.

Dr. D. FLEISCHMAN read a paper on "Removal of Nasal Polypi." [See page 265.] Discussion by Drs. Hull and Cook.

On motion of Dr. Ball, the meeting adjourned at 10:30 P. M.

The semi-annual meeting of the Medical Society of the County of Albany was held in Alumni Hall, on Tuesday, May 13, 1884.

The President called the meeting to order.

There were present: President Bendell, Vice-President Archambeault, Treasurer Bailey, Secretary Bartlett and the following members: Drs. Bou-

drias, D. C. Case, H. S. Case, Crawford, Culver, Featherstonhaugh, Fleischman, Freeman, Hale, H. Hun, Lyon, March, Moore, Morrow, Munson, W. J. Nellis, Perry, R. H. Sabin, William B. Sabin, Snow, Thompson, Van Slyke, Woodward.—27.

Minutes of last annual meeting were read, and, after amendment, were adopted.

Dr. N. L. SNOW, chairman of the Board of Censors, reported that the Board of Censors had examined the credentials and standing of Drs. R. J. Brown, A. M. C.; T. F. C. Van Allen, A. M. C.; G. S. Knickerbocker, C. P. and S., New York; E. C. Hallenbeck, Bell. M. C.; J. D. Craig, A. M. C.; J. H. Mitchell, A. M. C.; and, having found them satisfactory, recommend the gentlemen to membership in this Society.

On motion, the report was adopted and the persons named unanimously elected to membership by a rising vote.

Dr. LORENZO HALE, from the Executive Committee, reported the following: The Executive Committee, to which has been referred the claim of Dr. Thomas Beckett for funds advanced to the credit of the Medical Society of the County of Albany, report that after the examination of the Treasurer's accounts, and the reception of a statement from Dr. C. H. Porter, Treasurer of the Medical Society of the State of New York, they find that said claim is just and valid, and recommend that it be accepted as an equivalent for the dues of Dr. Beckett to this Society for the period extending from October 1, 1876, to October 1, 1883, inclusive.

The report was accepted, and the recommendation embodied therein was adopted.

Under the order of miscellaneous business, Dr. Snow gave notice that at the annual meeting he should offer an amendment to the By-Laws, to be called Article 8 of Chapter VI., to read as follows: "All members failing to attend the annual or semi-annual meeting shall pay a fine of fifty cents to the Treasurer of the Society for each and every such offence.

Dr. FREEMAN made a motion that the presiding officer at each meeting call to order punctually at the hour specified. Adopted.

The Society then listened to the semi-annual address by its Vice-President, Dr. J. L. Archambeault, of Cohoes, upon the topic of "Cæsarian Section." The subject announced for the address was "Pleuritic Effusion and the Use of the Aspirator;" but the doctor, having come into the possession of some facts of great interest upon the Cæsarian operation in the early months, considered that they would be more instructive, and therefore presented them.

At the conclusion of the address, on motion of Dr. Freeman, the thanks of the Society were tendered to the Vice-President for his able and interesting address and a copy requested for publication.

A motion to adjourn having been offered, at 4:30 P. M., the President announced there would be no more regular meetings until October.

Adjourned.

E. A. BARTLETT, M.D., *Secretary.*

THE

MEDICAL ANNALS:

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VOL. V. OCTOBER, 1884. No. 10.

MENTAL SYMPTOMS OF ORDINARY DISEASE.*

BY JNO. BEN. STONEHOUSE, M.D., A. M. C., '71, ALBANY.

The more intimate we become with the phenomena of mental action, the greater amount of evidence we gather of its dependence upon bodily conditions for its existence and healthy and perfect manifestation. As the theologians of the middle ages—the alienist physicians of that period—received into their cathedrals the light of day only to a limited extent, and that through the medium of colored glass, so as to produce the "dim religious light," while artificial light burned before the altars, so were their minds closed to the natural light of the human understanding and only illumined by the artificial rays of their prejudices. Thanks to the conscientious search for truth, in which the representatives of our profession have taken so important a lead, a physiological psychology has been established. Until lately, however, the work in this department of medicine has been carried on mainly by specialists; the symptomatology and treatment of mental disease have been placed upon a scientific basis; insanity has ceased to be a demonical possession, and become a disease following the same laws as control other pathological conditions of the body. But it seems as if progress cannot further be continued without a more careful study of mental symptoms by the general practitioner, and especially in their first manifestations and in their relations to other diseases. The

*Read before the Medical Society of the County of Albany, April 23, 1884.

carefully compiled results of such study carried on by competent observers in all parts of the world would, undoubtedly, throw light upon many of the problems which are now of absorbing interest to the alienist and the student of social science. It is with a desire to interest the members of this society in such observations that I present this paper to you this evening.

In the initial or pre-tubercular stage of pulmonary phthisis there is a well-known tendency to a high state of mental activity. Why this should be so it is difficult to say. There is, of course, an accelerated pulse rate and increased temperature, and it is not difficult to imagine in connection with these symptoms an increased supply of blood to the arterial cells. Whether this is a sufficient cause to produce so marked and characteristic a change in intellectual activity is doubtful. Perhaps some nervous connection between the lungs and brain, not fully appreciated at present, or the presence in the blood of an agent in some way associated with the development of tubercle may be influential in this change. At any rate, the change takes place, and the discovery of its cause is of sufficient importance to lead us to give it careful consideration.

Another physical condition in which an unusual mental power and brilliancy is developed, and whose causation may with greater probability be suggested, is that of chronic gout. The presence in the blood of an excess of nitrogen is well understood to be a cerebral stimulant. A nitrogenized diet is desirable for the development of nerve force; the authorities of reformatories and orphan asylums realize how necessary a liberal nitrogenized diet is in giving mental stamina to irresolute children. Now, the blood of the gouty is highly charged with nitrogenized matter, and this may be the explanation of the mental condition of the gouty. There is, however, another condition to be considered. We have in these cases contracted terminal arterioles, high arterial tension and hypertrophied left ventricle. In consequence of this the blood supply to the brain is liberal, and, being rendered more stimulating by the excess of nitrogen which it carries, makes possible an unusual degree of cerebral activity.

The precocity of children suffering from rickets is well known. Another fact is that the blood vessels of their large heads are of extra large calibre. Here, too, a stimulating effect is to be expected from foreign agents circulating in the blood — the lithates.

The condition of the cerebral circulation seems to be, as would be expected, the most important element in determining the mental characteristics of bodily conditions. Take a hunchback, in whom the blood flows more directly and strongly to the brain — he is usually distinguished for vivacity of spirit. Of course, we must remember another element which may have its effect — the physical deformity turns the mind to mental cultivation. This is undoubtedly so in many cases; but no amount of determination to compensate for bodily defects by mental superiority would force a brain poorly nourished to good work, if, indeed, it is possible for such a brain to develop the necessary amount of will power. A free supply of arterial blood is necessary to intellectual development and the exercise of will power, as well. As Fothergill says, when discussing this very question, "The power varies with the pressure on the square inch, either in brain blood vessels or engine boilers." Again, according to Rokitansky, there is in a case of distorted thorax cardiac hypertrophy, and the distortion of the aorta occurs after the cerebral vessels have been given off. Thus there is in existence an obstruction which increases the blood pressure in the cerebral arteries.

Perhaps no two class of diseases present such marked contrasts in their mental symptoms as the pulmonary and abdominal. The consumptive, for whose departure friends are in constant waiting, lays his plans for years ahead. A slight and transient form of abdominal disease often gives rise to a melancholia ending in suicide, while I venture to assert that a hopeful, happy, sanguine patient suffeing from abdominal disease has seldom, if ever, been seen by any of the physicians present. How do these conditions affect the arterial circulation? A thoracic pulse (if such a phrase be permitted) is usually full and sometimes bounding; in abdominal disease the pulse is small and even thready. In the former case the patient is bright and hopeful; in the latter, dull and despondent.

These mental symptoms are occasionally of service in diagnosis. The melancholia of abdominal disease, and especially from inaction of the colon, is, according to Vander Kolk, occupied with imaginary misdeeds, but the melancholia associated with some disturbance of the reproductive organs takes on a religious character — "he is forsaken of God, who can never forgive him his misdeeds; he is lost eternally." The connection between

morbid religious ideas and disease of the generative organs is quite constant. It is possible that it may suggest an explanation of the association of sexual passion with many of the religions of the past and present — from the times of the phallic worship down to the time of mormonism.

We have all been used to search for the three symptoms of exophthalmic goitre — protruding eye-balls, an enlarged thyroid and tumultuously beating heart. If the physicians present will recall their cases of this disease, they will remember, I think, that the women have been extremely neat in dress and habits, above the average in intellectual ability, but subject to emotional storms with great irregularity, the object of fondest attention becoming suddenly, without warning, the creature upon whose head she pours the vials of her wrath.

In addition to the fear of death, of which I have already spoken, the sufferers from heart disease present a mental condition marked by caprice, unsustained volition and suspiciousness.

In cancer the most usual mental attitude is that of sullen and defiant submission to the inevitable. Not that the patient is not anxious to save himself, but his curious mental condition overpowers the instinct of self-preservation.

In pyæmia the condition is that of absolute indifference. From the first chill this indifference is noticeable.

It is unnecessary to speak at any length of the various forms of delirium which accompany diseases. I venture to assert that you all have learned to recognize differences in their symptomatic details that are almost diagnostic. In closing, however, I wish to call your attention to certain cases in which these mental peculiarities have become insanities, and are very frequently of real service to the skilled observer in discovering the bodily conditions by which they are occasioned.

Rheumatism gives rise to acute and chronic forms of insanity characterized by very great depression, with occasional attacks of maniacal excitement. Skae regards the psychoses of rheumatism as about as well defined as paralytic dementia and as having a fair prognosis. The chronic form is the most characteristic, and has usually three stages — (1) of melancholia, either of the atonic variety or with unsystematized delusions; (2) the delusions have become systematized; (3) a mental state closely resembling general paresis. The delusions are at first of persecution, of poisoning of food, of continual stabbing, etc., etc.

Later, as these become systematized, particular persons are selected around whom all the suspicions are made to gather. This is generally a wife or husband or near friend. This is a brief sketch of rheumatic insanity, and the occurrence of these symptoms in any patient should render us suspicious of rheumatism as the cause. If however a case presents similar delusions of persecution and suspicion with delusions referring to the generative organs — that the penis is to be amputated, that it is the seat of a loathsome disease, etc., etc.— it can be determined without much hesitancy that chronic alcoholism, and not rheumatism, is the cause of the insanity. I have only time to speak of one other form — insanity from scarlatina. Kiernan (*Journal of Mental and Nervous Diseases*, January, 1882) comes to the conclusion that three groups of mental phenomena are produced by scarlatina, independent of delirium — (1) a form of melancholia agitata attended by hallucinations and its inception preceded by a decline to normal of the high temperature previously existing; (2) cases of dementia due to meningitis — the patient passing from the hyperpyrexia of scarlatina to that of meningitis, on recovery from which he is found to be demented; (3) patients who show either marked change from the character antecedent to the attack of scarlatina, or else retain in after life some of the juvenile characteristics of the period prior to the attack of scarlet fever, or occasionally become victims of moral insanity. Delusions of identity, followed or accompanied by pleasurable delusions, are usually found in the first named class. This form of insanity is thus hastily described, not because, like the insanities of rheumatism and chronic alcoholism, it is to any extent diagnostic of the scarlatina — its cause; but it is typical of the symptoms found in the post-febrile insanities. Spitzka says that the patients suffering from any of these post-febrile psychoses are, as a rule, comparatively lucid during the daytime — they reason more acutely, but always upon the basis of their delusive conceptions. They are, therefore, all the more dangerous during this period. Attacks of violent frenzy occasionally complicate the case.

This by no means exhausts the material for a paper on this subject. I might speak of the mental symptoms of diabetes, chorea, anæmia, epilepsy, menstruation and pregnancy, and many other physiological and pathological conditions; but enough has been presented, I think, to prove that mental symp-

toms are in many cases dependent upon, and characteristic of, certain bodily conditions, and that careful study of the mental condition of patients suffering from general diseases (especially before actual insanity can be diagnosed) may be made of incalculable value not only to the asylum physician, but to the general practitioner as well.

DISCUSSION.

Dr. H. V. HULL referred to a case of valvular disease of the heart where the patient manifested the despondency spoken of in the paper, and, in contrast, recalled the general hopefulness of patients suffering with pulmonary tuberculosis. He cited a case of delirium tremens, the subject of which, a man, had been sometime previously bitten by a dog; after a fit of hard drinking the mind of the man continually reverted to the bite. Reason in this case was temporarily dethroned; under treatment consisting of anodynes, concentrated nourishment and carefully adjusted restraint the patient recovered.

PHARMACEUTICAL EDUCATION.*

BY A. B. HUESTED, M.D., A. M. C., '63, ALBANY.

Young Gentlemen:

It is a pleasant duty that has devolved upon me this evening, that of addressing a few words to you on the opening of the fourth course of lectures in this college. I say pleasant, because by your presence here you indicate a desire to add to your store of knowledge and make sure the foundation on which your future welfare and prosperity depend. It is always a pleasure to associate with and assist, slight though it may be, those who are desirous of gaining knowledge. It is pleasant, also, because I see before me familiar faces, calling up cherished memories of a year past, promising a continuation of those associations, while the new bring the hope that these pleasures are to be extended.

In behalf of the college, its trustees and faculty, I extend to you a cordial welcome, and express the hope that our winter's work may not be without mutual benefit and pleasure.

To most, if not all, your entrance here may at first seem like a return of the school-days of childhood, and yet, if you but think a moment, you will readily see how different. Then

* Opening Address before the Albany College of Pharmacy, October 6, 1884.

many, I will not say all, thought school life a hard one, thought worse of the teacher, longed for Saturdays and summer vacations, longed for the time when school-days would come no more, and you be free, as you then supposed, to go and do where and what you choose. Now, after some few years' experience in the world, you find yourselves back, as it were, at school again, not, however, by force, or because someone else willed, but of your own free will. The knowledge which you already have — experience and wisdom gained in the world — has brought to you new thoughts, new purposes, perhaps new resolves, and you enter here with a definite object in view, and, let us hope, a firm resolve to pursue it faithfully to the end. The method of instruction here, usual in nearly all the more advanced educational institutions, is not by fixed lessons and recitations (perhaps it might be better were it more so), but by lectures. You are here more masters of yourselves. The strict and often irksome rules of younger days do not exist. You are responsible almost solely to yourselves, and will have to account to yourselves in after years for the work here, if it is not faithfully done.

You are now supposed to have acquired the knowledge imparted in the common schools at least; if more than that, so much the better for you; also to have had some experience in the arts and mysteries of the apothecary, and to have decided to make that honorable art or profession your calling.

In all ages of the world the mass of the people have given to the medicine man a position above and beyond that of any others, and, though the apothecary of to-day may not aspire to the rank held by the doctor, he is, and should be, by his acquirements, on the next step of the ladder. The nature of his work, combining trade interests and scientific pursuits, calls for a well-balanced mind, if the full measure of success is to be attained. He must possess a knowledge of the laws of trade, as well as the physical and chemical laws of matter. The former may be acquired by any one with average intellect and observation during his term of apprenticeship, but the latter necessitates an expenditure of much thought and study. Any one may learn to manage, make attractive and enticing, the ever-present and conspicuous soda draft of the American pharmacist, or even to carbonate the water, by the use of marble dust and vitriol and a proper apparatus, but the marble dust giving out at a critical

moment, the work must stop, unless chemical knowledge steps in and says, "Use bicarbonate of soda or whiting," plenty of which are on hand. Calls are frequently made upon the pharmacist for some simple chemical or pharmaceutical preparation, and, upon seeking it, it is not to be found. This will occur because of the great variety of articles to be kept or from a new use for an old, but little used, article. None is to be obtained from neighbors, for there are none, or the neighbors are out of stock also. A thorough knowledge of the calling makes the want but little felt, for in a short time knowledge and the crude materials have produced the substance, and the want is supplied.

During my summer vacation, happening in the drug store of the town where I was stopping, a prescription calling for hyposulphite of soda was handed in. The druggist, for such he was rather than apothecary or pharmacist, informed his patron that he could not fill the prescription, for he had none of the hyposulphite. The same day he had a call for extract of digitalis, but could not supply that. He undoubtedly had sulphur and carbonate of sodium in stock, and, if he had possessed the chemical knowledge, could have formed his hyposulphite. So he no doubt had fluid extract of digitalis or the crude drug; a little labor would have given him the extract, and he could have been prepared for the next call, at least, for these drugs, and at but little outlay of money.

The experience of a southern brother during the late war is quite interesting, and shows how his early education enabled him to continue his business with profit. During the greater part of four years the South was almost cut off from the outside world, and the time came when the stock of many articles was exhausted. Drug stocks suffered with others, and many articles became very scarce or entirely wanting. Our friend, on his return from a term of service, found his stock quite incomplete. Paregoric was wanted, but no benzoic acid was to be had, and with a frying-pan for a retort and an old pasteboard hat box for a condenser he went to work, and soon had the acid and made paregoric. Nitrate of silver and lunar caustic were wanted, but out of stock and could not be purchased. Silver was to be had, also nitric acid, and a little labor soon gave him the salt; then moulds were made and the crystals fused and cast into sticks. Red oxide of mercury he prepared from the metal

by the aid of the nitric acid. Epsom salts he was out of, but having a case of damaged carbonate of magnesia, and sulphuric acid, his knowledge of chemistry gave him the power of soon converting this into the sulphate of magnesia. Many other of the more commonly used chemicals he made when the means were at hand to use, and all was done with very limited chemical utensils. His early education had been thorough, and, like all knowledge, when once thoroughly possessed could not be taken away by any combination of circumstances. The lesson taught by his experience is that thorough work in school and college repays in double proportion, and also that it is not always best to rely on the manufacturer and wholesaler for supplies, but be ready to meet any emergency that may arise. There are many articles in the stock of the apothecary of which but little is wanted and then at long intervals which can be made at odd times in small quantity and at less rates than to purchase. The manufacturing chemist and wholesale dealer do not work for nothing. The pharmacist should most certainly prepare all his tinctures and syrups; could make most elixirs, pills, suppositories, emulsions and oleates; will find it often to his advantage to prepare extracts and fluid extracts; nearly all liquors, spirits and waters and many minor and sparingly used chemicals. He should most assuredly be prepared to tell if his iodide of potassium contains iodate or not, or if there is bromate in his bromide of potassium, arsenic in his bismuth, or corrosive sublimate in his calomel. He should be able to say with certainty whether his powdered cantharis is of proper strength, his quinine free from other alkaloids, to know the morphine per cent. of his opium, the per cent. of resin in jalap, and hosts of other matters time precludes us from mentioning here. How many pharmacists of to-day prepare their own syrup iodide of iron, sol. cit. of magnesia, seidlitz powders, and such articles, to say nothing of the more common tinctures and syrups? A few years since, in talking with a brother pharmacist who had just sold out his store in a village not a hundred miles from here, he made the remark that he always made his own spirit of nitre. This surprised me, as I was entirely unprepared for such a revelation. I found however that making his own nitre consisted in buying what is called 4 F. nitre, which, by the way, seldom holds out in strength and is frequently acid, and diluting it with an equal amount of water. Just so, many make water of ammonia, by purchasing the ordinary so-called

4 F. water of commerce and diluting with water, fearing to risk the lives of patrons with so powerful an article. Very little of this comes up to the required strength of the pharmacopœia. He should be able to ascertain quite accurately the specific gravity of his alcohol, not relying on a hydrometer, as these are generally only approximate. It has been too much the custom to rely on others for such work; the pharmacist should be able to, and actually should, verify his commodities from time to time.

A wise man does not begin building until he has made all needful preparations for it. His object is then easily and thoroughly attained; even though complications arise, they are nearly always overcome because of thorough preparation. By your attendance upon the course of instruction here proposed you express the intention of making yourselves perfect in your vocation. On the part of the faculty and trustees I can assure you that every thing possible will be done to make the institution practical, serviceable and thorough. At the same time, let me assure you that however excellent the advantages offered, your attainments do not alone depend on these. As in the building of any structure perfection is secured only by the union of the several factors, so here your acquirements rest not only on the instruction given, but on your own exertions, as well, in supplementing that instruction with work of your own. By our united labors I assure you a full measure of reward. In view of this, let me urge upon you at the beginning to be diligent, not idle, slothful or indifferent; comprehend fully from day to day what is lectured upon; devote a certain time each day to the work in hand, and let no trifles interfere; work not to get a bare sufficiency, but to see how near perfection you can come; lay out at the start a course to pursue, persistently follow it to the end, and when the test is applied, your measure will be found complete and your reward sure.

In your work here it is not sufficient that you attend the lectures; there is much aside from this that you can and should do, in a thorough reading and understanding of the subjects lectured upon. Some parts of the work will require the exercise of memory, others the reasoning powers; facts are to be remembered and principles comprehended.

You will need every aid in the prosecution of your work that can be brought to bear in your interest, and of these aids I

know of none of greater value than a system of quizzing. This is done in part by your teachers, but cannot be carried to the extent desirable because of the short time devoted to the course. Quiz classes should be formed among yourselves, consisting of four, six or eight students, meeting once or twice a week, and each one alternating as quiz master on the different subjects. It is not necessary that some one should be hired or a volunteer from outside secured for this work. The former necessitates extra expense, and volunteers are not always to be relied on. It should be no discredit to the one quizzing that he has to resort to books to aid him in his work. You are here to get knowledge, and false delicacy in its acquisition should not be allowed to interfere. There is more hope for him who admits his imperfections, and is willing to overcome them, than for him who observes a profound and seemingly wise indifference. The more times a principle or fact is repeated and discussed the more likely it is to become permanently fixed in the mind. When once your quiz classes are formed and in good working order, do not allow the interest in them to abate nor the discussion of foreign matter creep in and consume the time. This would be like planting a plot of ground with seeds from beautiful or useful plants and then allowing it to take care of itself. The seed will sprout and grow; so will weeds, but the latter will flourish more abundantly, in time killing, or at least dwarfing, the intended crop. So here, if outside matters are introduced, even under the most plausible pretext, the principal object is injured, the quiz languishes, good results are wanting, and the question soon presents itself, "Of what good are quizzes?" The fault, you will see, is not with quiz classes, but in allowing them to be perverted from the original design. It is only he who continues in the race to the end of the course who has even a prospect of winning.

To such as are serving in stores during term time I would say, You have no easy work before you. The duties of the day necessary in honestly serving your employer, and the attendance of lectures are not calculated to act as a tonic to more extended work by yourself. As the course advances and the midnight lamp has been burned for a time, there will often come the inclination to slight or put off what should be attended to at the time. You will need much determination and will-power to overcome this, and should you be tempted to give way, bear in

mind that there is always an end to all things, and that when the work is ended there will be plenty of time to rest. To such as these I would say, Gird yourselves manfully for the work before you; you are not the first to enter upon such an experience, nor will you be the last. Remember that youth is the time for labor, and no good thing is to be enjoyed or worth the having that does not cost some exertion.

To such as have all the time outside of lecture hours at their disposal, a few words of caution may not be out of place. This abundance of time may prove an injury, because it often brings the temptation, when duty, or interest, and pleasure are at variance, to decide in favor of the latter, and thus put off till too late the work that should be accomplished each day. It is perhaps more necessary for the man of leisure to map out a definite line of work, if he aim to accomplish any thing, than for him whose time is fully employed. A friend, now gone, once told me, "If you wish to get a thing done, go to the busy man for it." Work begets work; idleness, idleness. In your surety of plenty of time for accomplishing your labor, see to it that it is not spent in idleness and frivolity, or even worse, for, if so, you will certainly realize, perhaps when too late, the folly of such a course.

It is, perhaps, a misfortune, that we live at the present day, because I believe that pharmaceutical education is in a transitional stage, and, to use a common phrase, is "neither hawk nor buzzard." The time has been when all that was considered necessary for one to become a pharmacist was a few (three to five) years' experience with one who bore the title of a pharmacist, or kept what is called a drug-store. To-day something more is required, and a theoretical or college training, as well as a simple apprenticeship, is becoming to be considered necessary. This theoretical education has not as yet reached its maximum, and will not until the time devoted to it extends over the greater portion of the two years now called college years, and all of that time be necessarily devoted to the work in college, because of the more extended requirements of the college. Changes in the habits and customs of a people are, however, of slow growth. The same holds good with respect to a class. Therefore, *we* may not expect to see the advance of which I speak, yet we should all the more strive for the general good of making the most of opportunities as we find them.

That an advance is being made in the knowledge and skill demanded by the public of the pharmacist is evident in the enactment of laws having for their object the limiting of the business to such as are properly qualified for it. Our own state, during the past year, has by its law-making power placed upon the statute books such a law, and put in the hands of a board the power to decide for the future who shall be declared competent to be entrusted with the actual work of pharmacy. The enactment of a law does not make a competent pharmacist, nor should one be forced to abandon a business because he does not come to a recently made legal standard. Many are by the law entitled to the privileges and duties of pharmacists, while from those who enter in the future a guarantee of proficiency is to be demanded. A prospective benefit to the public and advance in knowledge by the pharmacist may be reasonably hoped for from such laws, if properly and wisely executed.

You have chosen the business of purchasing, preserving, compounding and selling of drugs, medicines and poisons as your vocation; that is, your main work, by which you expect to earn your daily subsistence and a surplus for old age and luxuries. It is to be hoped that you have not been lured by the popular opinion that "there's millions in it," but rather from love for, or a peculiar adaptation to, it. Statistics and experience show that those people who have a vocation and an avocation — that is, a greater and a lesser, or a business aside from the main work, are the most happy, contented and prosperous. Such minor work is a recreation. It corresponds in youth to the recesses, holidays and vacations, and in early manhood and mature age to the pursuit of some object, art or science aside from the main business of life. Among women these avocations are found in the care of plants, fancy work, music, painting, and the like. While men may take to some of these, they more often pursue the study of some science, the practice of some art, or indulge in some wholesome and invigorating athletic games. It is this peculiarity in man that has given rise to our Chautauqua meetings, our Agassiz chapters, natural history societies, institutes of learning and all kindred associations. Where and how do those who have no avocation generally spend their leisure time? In idle dreaming, gossiping with neighbors, or in convenient and enticing resorts where the brain is muddled and the pocket drained of that which should be put to better use. When an avocation is

allowed or indulged in to extremes, it becomes what is called a hobby, then often defeating its good purpose. When indulged in to a moderate extent, at least not to the injury of one's vocation, it is certainly beneficial, not only as relaxation from more exacting and laborious work, but as an educator as well. In the vocation you have chosen, you will find the way open for a choice of several avocations. Your chemical knowledge, if well and thoroughly understood from the beginning, may lead you into chemical research, the compounding of elements, the resolving of compounds, or to more exact processes of chemical reactions as applied to the arts; your study of pharmacy and materia medica may lead you in a search for more potent, less nauseous, therefore more beneficial and acceptable, pharmaceuticals than we now have; or, should you so desire, you could become one of the world's so-called benefactors, by compounding some remedy for human ills, but let us hope that any such efforts will bring forth more desirable and scientific proprietary articles than many of those which now struggle for life. A good foundation in botany will give you the choice of an avocation still more at variance with your vocation than either of the others, and one that will be productive of as much or more good. A study of the vegetable world is not uninteresting, may be pursued on nearly all occasions when brought in contact with nature, and will undoubtedly tend more to recuperate the physical being than the others.

In what I have said to you to-night it has not been my intention to magnify or make appear too difficult the work, but rather to urge a thoughtful consideration of what is before you, how and why take advantage of the time and opportunity, so that in after years you may have no cause for regret or self-censure. A just appreciation of the present and a laudable ambition for the future are proper and necessary aids to the acquisition of knowledge. He who sees always a step beyond, unto which he continually strives to attain, is more sure of accomplishing something than he who has no point nor object for which he works.

In your estimates of what you should like to attain, remember that self-work is the only kind of labor which will accomplish the object; no one else can do it for you. A little knowledge stored away as money put into a savings bank, will not increase unless additions are made to it, but, unlike the money, these additions must be made by yourself.

You are the architects and builders, too, of your own futures; each day's work helps to make the sum total of your lives.

The poet fully realized and truthfully portrayed all I have tried to impress upon you to-night when he said:

"All are architects of Fate,
Working in these walls of Time;
Some with massive deeds and great,
Some with ornaments of rhyme.

"Nothing useless is, or low;
Each thing in its place is best;
And what seems but idle show
Strengthens and supports the rest.

"For the structure that we raise,
Time is with materials filled;
Our to-days and yesterdays
Are the blocks with which we build.

"Truly shape and fashion these;
Leave no yawning gaps between;
Think not, because no man sees,
Such things will remain unseen.

"In the elder days of Art,
Builders wrought with greatest care
Each minute and unseen part;
For the gods see everywhere.

"Let us do our work as well,
Both the unseen and the seen;
Make the house where gods may dwell,
Beautiful, entire and clean.

"Else our lives are incomplete,
Standing in these walls of Time,
Broken stairways, where the feet
Stumble as they seek to climb.

"Build to-day, then, strong and sure,
With a firm and ample base;
And ascending and secure
Shall to-morrow find its place.

"Thus alone can we attain
To those turrets where the eye
Sees the world as one vast plain,
And one boundless reach of sky."

ABSTRACTA.

THE DROP—THE METRIC SYSTEM.—No doubt the drop is aggravatingly vague, but the adoption of a particular method of delivering drops would, it seems to us, go far toward reducing their indefiniteness within practically insignificant limits—limits quite as narrow as those that bound the variations of minim-glasses. It would be interesting to compare the graduation of these glasses as furnished by different makers, and we suspect that such a comparison would not show wholly to the disadvantage of the drop. A further drawback to our entire trust in the minim-glass is to be found in the fact that the surface of a column of liquid contained in such a glass does not form a dead level, so that the indication is likely to be read differently by different observers. Some weight may be attached, too, to the circumstance that, when a certain number of minims have been measured off in the glass, they cannot be wholly transferred from it without dilution, and the quantity that remains adherent to the glass varies according to a diversity of conditions, such as the temperature, the viscidity of the liquid and the shape of the glass.

Liquids can of course be measured accurately, even to small fractions of a minim, but we doubt if, on the whole, any method will be found more satisfactory for ordinary use than the dropping process. Accuracy might be gained by the simple expedient of weighing instead of measuring, but to unlearn our doses by measure and to learn a fresh set of doses by weight would involve all the vexation that has thus far attended the attempt to bring the metric system into use among us—an attempt which seems to us certain to fail, and, moreover, to be deserving of failure.—*New York Medical Journal*, Sept. 20.

URINARY CALCULUS—ALBUMINURIA.—H. Van Hutten, M.D., New City, N. Y., in *Western Medical Reporter:*

Case I.—J. C. R., age 52, a blacksmith, but unable to follow his trade for two years on account of pain in lumbar region, with emaciation; has passed several stones some as large as a pea. Urine frequently arrested suddenly in its passage, has frequent attacks of severe pain in the groin, gradually moving downwards, and suddenly relieved during micturition, and stone

always found in vessel immediately afterwards. I gave Lambert's Lithiated Hydrangea in teaspoonful doses three times a day. In two weeks all symptoms decidedly modified; in four weeks "feels like another man." Thereafter no stones passed.

Case II.—T. M., aged 38, farmer, married; has for some time been "running down." Complexion sallow, urine sometimes very plentiful, and at others scanty, has "lost all his ambition," frequent pains across his kidneys, etc. On test, urine shows considerable albumen. Ordered Lithiated Hydrangea in two-teaspoonful doses every four hours. In ten days pains in back occur less frequently and with less severity; in two weeks appreciable change in complexion, "feels better in every way," but little albumen in urine and urine more nearly normal in quantity. In four weeks feels much stronger, pains in back almost entirely gone; urine shows mere trace of albumen. In two months, says he is cured, no albumen in urine, "feels like himself again."

Stigmata Maidis.—Among the new remedies with which the materia medica has of late years been enriched, there are few which have sprung into greater prominence, and which manifest evidence of a more tenacious hold on the regard of the medical practitioner, than the stigmata of maize—the "silk" which embellishes the stalk of our common corn. It may seem somewhat incongruous to call an article with which the people of this country have been so long familiar a "new" remedy. The adjective, however, as in the case of many other new remedies, so-called, has reference rather to the discovery of some therapeutic property than to the drug proper. Corn-silk is, therefore, a new remedy, from the fact of the comparatively recent discovery of its properties as an emollient, antiseptic and diuretic. Under its lenitive action the inflamed surface of the genito-urinary tract, and more particularly, perhaps, of the bladder, as in vesical catarrh, is soothed, and the decomposition of urea into the irritant ammonia salts is checked. The flow of the urine is at the same time augmented, and thus we have a combination of the very effects which an intelligent comprehension of a case of vesical irritation would seem to dictate on the part of the therapeutist.

The demand for corn-silk has been rapidly growing since attention was first called to it by Drs. Dassun and Dufau, of

Paris, and Professor Castan, of Montpelier. The fluid extract must be made from the recent drug, and hence can be prepared only during a few months in the year. The demand, however, for this fluid extract has been in excess of the possible supply during the past year, leading to the substitution, by unscrupulous manufacturers, of a worthless article for the freshly gathered corn-silk, much to the detriment of the reputation of this drug. Messrs. Parke, Davis & Co., who were the first to place a preparation of stigmata maidis before the profession of this country, with the return of the season have laid in a large supply of the drug in anticipation of a continuance of its popularity. Competent employés of this enterprising house have for some time been at work in the cornfields of the west laying in a stock of the green drug and suitably preparing it for preservation until it is made up into the form of a fluid extract. In view of the facts above stated, it is important that those who may have occasion to employ corn-silk may know whence they may obtain a reliable preparation.—*Therapeutic Gazette.*

Butter, fresh and pure, turns almost white on contact of sulphuric acid; butterine, from lard and other fats, changes to crimson and different colors.—*Caterer.*

Rancid oils may be sweetened, says Viallis (*Rundschau Leitmeritz*), most perfectly by filtration through wood charcoal which has been impregnated with soda. Large quantities may be treated in this way by preparing barrels as follows: Holes are bored in the bottom of the cask, or barrel, and a piece of flannel laid over them. On the flannel is laid a layer of wood charcoal which has been impregnated with soda. If the oils are highly colored, and it is desired to decolor them, a layer of animal charcoal is sifted over the wood charcoal. The worst oil filtered through two or three such casks becomes perfectly clear and sweet.—*National Druggist.*

To Distinguish True Butter.—Camper communicates to the *Rundschau Leitmeritz* the following process for distinguishing genuine butter from oleomargarine. When true butter is heated over a clear flame, it "browns," and gives out a pleasant odor—that of "browned butter." In heating there is more or less sputtering, caused by minute particles of water which are retained in washing the butter. On the bottom of the pan or vessel in which true butter is heated a yellowish-brown crust is

formed, consisting of roasted, or toasted, casein. When oleomargarine is heated under similar circumstances, it does not "brown," but becomes darker by overheating, and when heated to dryness gives off a grayish steam, smelling of tallow. There is no "sputtering" when it is being heated, but it boils easily. If a pledget of cotton or a wick be saturated with oleomargarine, set on fire and allowed to burn a few moments before being extinguished, it will give out fumes which are very characteristic, smelling loudly of tallow, while true butter behaves very differently.—*Pharmaceutical Record.*

Milk Test.—A German paper says if a polished knitting needle is dipped into a deep vessel of milk, and immediately withdrawn in an upright position, some of the fluid will hang to the needle if the milk is pure; but if water has been added, even in small proportions, the milk will not adhere to the needle.

Cerebral Fatigue as a Sign of General Paralysis.—Dr. Sizaret, in the *Revue Médicale de l'Est*, demonstrates the importance of a quickly-produced cerebral fatigue as a sign of general paralysis. At the commencement of general paralysis, or during a remission, there is neither hesitancy of speech, trembling of the tongue or lips, inequality in the pupils, nor delirium, but only a certain degree of maniacal excitation, an exaltation of the sentiment of personality, acts denoting a perversion of the moral sense (*lésion du sens moral*), and a change of manner, but no symptoms which might not be met with in some other form of mental disease. In cases of this kind M. Sizaret considers rapid cerebral fatigue as characteristic of general paralysis. Ask the patient to count from one to one hundred or two hundred. If he complies—which paralytics generally do with eagerness—we soon see him making error after error, jumping over tens and hundreds, without perceiving his mistake, and ending in a mass of nonsense. Certain patients may count to three hundred without an error, but generally they cannot get past one hundred or two hundred, and oftener still they wind up at a still lower figure. The distance they can go without a mistake is equivalent, ordinarily, to a kind of dynamometric test as to the amount of cerebral force left to them. At the same time mental fatigue manifests itself in these patients, we observe the embarrassment of speech and the trembling of the tongue, lips and cheeks, characteristic of their disease. These two signs,

errors in counting and embarrassed speech, constitute a precious diagnostic element in the first period of general paralysis.

BASEDOW'S DISEASE (EXOPHTHALMIC GOITRE).—Dr. Chvostek recommends (*Centralbl. fur Klin. Med.*):

1. The ascending constant current applied to the cervical sympathetic on each side for at the most one minute.

2. The same to the spinal cord (the anode at about the fifth dorsal spine, the cathode high up in the cervical region).

3. Through the occiput (one pole at each mastoid process), and in certain cases through the temples, a constant current for at the longest one minute, and so weak that the patient can feel but the slightest sensation of burning. Sometimes. also, local galvanism of the thyroid gland with a weak constant current for about four minutes, the current to be reversed at the end of each minute. The application should be made every day.

AN UNFAVORABLE PROGNOSIS.—In such diseases as diarrhœa, typhoid fever, etc., the child, after having for days refused nourishment, suddenly swallows with avidity whatever is offered; *quinine* will be taken as readily as sugar. An explanation of this sudden change may, perhaps, be found in the cessation of cerebral function through the want of nutrition or of stimulation. Combined with this behavior is often found the Cheyne-Stokes breathing; this respiratory disorder has been also traced to the want of stimulation of the respiratory centres. —*American Journal of Obstetrics.*

DR. H. H. POWELL, professor of obstetrics and diseases of children, Cleveland Medical College, Cleveland, Ohio, says: "I have quite frequently used in my practice Bromidia, and think highly of it as a hypnotic, especially for children. I began its use first in my own family, and soon appreciated its value. It acts promptly, producing refreshing sleep without suppressing the secretions or being followed by the frequent disagreeable after-effects of opium."

MANY have become victims to the use of opium and morphine from the administration of these drugs for the relief of neuralgia. It is very gratifying to observe that such dangerous consequences may be averted by the use of Tongaline, or Liquor Tongæ Salicylatus, which is almost a specific in the acute forms of that complaint.—*Medical Brief.*

THE MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

F. C. CURTIS, M.D., A. VAN DER VEER, M.D., LORENZO HALE, M.D.,
JNO. BEN. STONEHOUSE, M.D., WILLIS G. TUCKER, M.D.

VOL. V. OCTOBER, 1884. No. 10.

THE RESTRICTIONS IN THE MANUFACTURE OF BUTTER IMITATIONS.

The act passed April 24, 1884, prohibiting the manufacture and sale of butter-imitations has become a law in the state of New York. The penalty for selling oleomargarine is a fine of from one hundred dollars to five hundred dollars and imprisonment for from six months to a year. It is truly gratifying to see in politicians the outward show, at least, of care for the physical well-being and the sanitary interests of the people; but, while no one should find fault with any legitimate means for protecting the public against fraud, yet the claim is raised that this law violates inalienable constitutional rights, both of manufacturers and consumers.

Some of the imitation-butter is no doubt unwholesome; but there are persons to whom it is a question whether the usual imitations are really more deleterious to health than some of the butter that is sold. Parties in the butter business know that many obtuse customers convey to their families, for table use, half-decayed butter, which is really a pure dairy product, but which is far more unwholesome than scrupulously clean, purified and tempting butter-imitations. If there are people who prefer to eat clean beef-fat, *knowing it to be such at the time of purchase*, rather than rancid dairy products, should there be a law which drives a wholesome commodity from their market?

We have always had laws against fraud and false pretences, which apply to the sale of imitations under the name of the thing imitated; to sell butter-imitation by the name "imitation," so that the purchaser knows what he is buying, is honest, and,

even in the face of this new law, it may yet be shown to be legal.

The public remember the indignation of New York city authorities upon discovering, last year, that certain parties sold skim-milk and buttermilk. The traffic was prohibited. How ridiculous did the authorities appear when it was shown that while the sale of skim-milk *for milk* was a fraud, yet that the skim-milk and buttermilk were legally sold to consumers with their eyes open, who wanted just what they bought for legitimate purposes! And now the state of New York has followed with a similar prohibitory folly in the matter of butter-imitations.

Is it constitutional to have a law prohibiting the manufacture and sale, for instance, of gold imitations, if sold under names which indicate that they are not gold? If oleomargarine is an evil, there are legitimate methods of fighting it; let us not, in attacking it, do evil that good may come. This is written not to espouse oleomargarine, but in the interests of correct methods.

A law requiring the distinct and constant label "Imitation" on all butter-imitations, and an indication of ingredients and proportions in the mixtures sold, together with the name and address of the manufacturer, and imposing extreme penalties for neglect of these points and for any fraud or misrepresentation on the part of the seller, would be a constitutional prohibitory law — prohibiting false pretences. Besides this, the law might provide for the appointment of inspectors empowered to search artificial-butter factories without warning, and to prosecute all parties who have made use of unwholesome material of any kind in the composition of imitation-butter.

This matter properly comes into the hands of the State Board of Health. The *Food and Drug Adulteration Act* (Chapter 407, Laws 141) was ample, and if the matter had been left with the State Board of Health, a body which has won universal respect for its integrity, for its competency and for its actual services, and if an appropriation to carry out the provisions of the last-named act had been given to that board, all would have been well, without further legislation.

The following is from the "Quiz-Compend on Organic Chemistry," by Henry Leffmann, M.D, D.D.S., published by P. Blakiston, Son & Co., Philadelphia:

Substitutes for butter are now largely sold under the names "oleomargarine," "butterine" and "suene." These are made from animal fats, tal-

low or lard, or from vegetable oils, and are often mixed with milk or true butter to more effectually conceal the adulteration. The detection of the substitutions is often difficult, but fortunately they have very little sanitary importance, as they are, if properly and cleanly made, as nutritious as butter itself.

L. H.

——THE Albany *Press and Knickerbocker*, on Wednesday, September 24, reprinted a large part of the editorial in our September number, upon the subject of "A Sanitary Need in the City of Albany." The editor of this enterprising newspaper has our thanks for this mark of favor. The dissemination of proper sanitary views among the people will hasten the day when the needed sanitary reform shall be accomplished.

——"MICROBE" is from the Greek, *micros*, "small," and *bios*, "life." It was coined by M. Sédillot, of Strasburg, in February, 1878. Shall we pronounce it in two syllables, "mi-crobe," or shall we say "mic-ro-be," in three syllables? The excuse for the popular usage of two syllables is that the word has come to us through the French; but its Greek primal origin shows an evident impropriety in using less than three syllables. The word "microbe" does not yet appear in any edition of either Webster or Worcester. L. H.

BOOK NOTICES.

DISEASES OF THE THROAT AND NOSE. By Morell Mackenzie, M.D. Vol. II. Illustrated, 550 pp. Price, cloth, $3.00. P. Blakiston, Son & Co., publishers.

The name of Dr. Mackenzie is so well known in connection with the subject on which he has long been a writer and teacher that whatever appears from his pen is looked upon in advance as classically authoritative. During the period of really scientific study of diseases of these parts, he has been identified with it. Laryngology, like several other specialties, has a separate history worthy of individualizing it of only about twenty years. Like the others, it has not failed to abound in literature. Many books and periodicals have made their appearance since that of Ludwig Türch was written. The developing period of a special subject makes this necessary, and it is hardly possible for even one just from the press to contain the latest observation. Our

author makes reference to this fact in his preface, and to the frequent modification of views necessitated in the progress of his work by the constant development of, and additions to, his subject. This makes new books frequently necessary; at the same time, it is likely that the work of a master will for a considerable time continue to be classical.

This volume is a partner of one previously issued on the "Pharynx, Larynx and Trachea." Nearly one-half of it is taken up with diseases of the œsophagus; the remainder deals with those of the nose and naso-pharynx. The latter includes chapters on hay fever and glanders. While it does not contain illustrations in color, such as are found in the work of Lenox Browne and others, it has numerous wood-cuts, illustrative of instruments and their technique more especially. These, and the practical tone of the book, will recommend it particularly to the general practitioner who desires information on this subject. Its descriptions of diseases are graphic and the affections of these parts, more especially those of the nose, both surgical and medical, are quite exhaustively treated. The author's extensive personal observation is constantly called upon, and this, incorporated with capable digestion of the contributions of others to the subject, is what we look for in a practical work. It contains in a moderate space a large store of information, and is in every respect a most admirable book. Those who are looking for the latest and most complete dissertation on this important class of diseases will not fail to add this volume to their book shelves. F. C. CURTIS.

FIFTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF ILLINOIS. 8vo, 676 pp. Springfield, 1883.

The first forty pages of this large volume are taken up with abstracts of the proceedings of the board during the year, including the summary report to the governor. In this letter we are told that issue of the volume has been delayed for some months by work found necessary upon a part of it. Included in the proceedings is printed a very satisfactory paper by the president of the board, on the "Sanitation of our Younger Cities." It contains pertinent suggestions especially applicable to the newer parts of the country. There is also given the schedule of examinations for candidates for certificates as medical practitioners; it appears that but six of sixteen applicants obtained the required eighty per cent. of correct answers.

The bulk of the volume consists of an appendix to this report of routine duty, and this appendix is devoted almost wholly to two subjects, viz.: Medical education and small-pox. The efforts of the Illinois State Board of Health in the direction of a study of medical education in this country and Canada, and the suppression of quackery in the state, are very well known. In fact, advance copies of this part of the whole report have been issued extensively in separate form. About two hundred pages of this print are filled with a valuable mass of statistics, giving the laws governing medical practice in the various states and provinces and an accompanying list of schools, with their respective requirements to graduation. There are 231 institutions accounted for in the list, of which only fifteen are in Canada; 154 of these are regular, and all the Canada schools are of this class. On the list fourteen are classed as fraudulent. It appears that there are in this state now fourteen existing colleges, and that sixteen have become extinct. By another table showing the geographical distribution of physicians there appears a great difference in the attractiveness of different localities for physicians. Thus, in Canada there is but one physician to 1,112 population, in New Mexico one to about 1,500, while in Maryland there is one to 329, and in New York one to 548. The two Carolinas and Utah are alone, in this country, in being so unseductive as to have less than one doctor to a thousand inhabitants. The report consists of statistics, without comment, and but scanty reference is made in the printed minutes to the operations of the board in this part of its work. From the secretary's report we learn that certificates authorizing practice were issued to 473 physicians during the year, of which six were upon the result of examination, and that a total of 7,034 certificates to physicians have been issued; also that 732 certificates have been issued to midwives.

Two words of comment occur to us in regard to this matter. One is respecting the oft-repeated question, "Is any medical legislation desirable?" The other is, "Is this legitimate work of a board of health?" It will always be an unsettled question as to the propriety of legislative interference with the practice of the healing art. There is much talk in this country of the inherent right of any man or woman to follow any pursuit they may please to, and of the right of any one, also, to hire any one to doctor him that he may please to. Of course any one who for-

mulates such a dogma is a fool, if he rests with his formula; at the same time, he shadows a prevailing unformulated sentiment. Then, all discussion among medical men of this topic is sure to bring out the sentiment that the most dignified thing for the profession is not to advocate any legislation, for it puts itself in the attitude of working for a selfish end. This is itself a selfish position, if a public gain will result from such legislation. The Illinois State Board of Health are not, however, in a position to decide this question for themselves, for in 1877, during the same session that it was itself established, a law was passed which placed the license power in their hands, either on a diploma satisfactory to them or on examination of the candidate; also giving them the power to revoke a license. They have gone further than was unsuccessfully attempted to go in this state, last winter, in our State Board of Examiners bill. Being put into their hands, the board have done most faithful work in executing the law. The compilation of statistics in this report is a part of this work, and is very valuable.

But that such work legitimately lies with a board of health is to be questioned. It appears to overshadow other work that it might better do. This report has, to be sure, more than three hundred pages given to the matter of small-pox, and this, we are told, is a considerable condensation of the material; it is the best part of the printed report—a trading out *in extenso* of the disease and an epidemic of it that occurred in the state. This represents about all that is reported on as done by the board in controlling disease. The great, prime object of a state or local board of health is to diminish the number of cases of preventable disease. There is enough to do in this direction to engross a large part of its attention. A second object is to contribute to the sum of observation of epidemics or endemics of these diseases and place it on record. A third is to keep a record of its vital statistics and of the movements of disease over its area. Perhaps the valor of its fight has made unduly prominent this execution of the medical practice bill, but it would be better if the board, perhaps, had not a reputation to sustain in this work, which, highly commendable as it is, should be a subordinate part of its work.

The report closes with details of mortality statistics and methods of their returns and a short nomenclature of diseases, with a table of synonyms that is valuable to registering officers.

From the statistics given it would appear that these returns are carefully gathered. The report as a whole, of this prominent state board of health is most valuable, and especially because it has not been run in a hackneyed mould, and partly, too, perhaps, because it is not a report of hackneyed work. F. C. CURTIS.

STUDENTS' MANUAL OF ELECTRO-THERAPEUTICS: embodying lectures delivered in the course on Therapeutics at the Woman's Medical College of the New York Infirmary. By R. W. Amidon, A.M., M.D. G. P. Putnam's Sons. 1884.

There are some things quite commendable about this little book of ninety pages, but it belongs, as its title indicates, to a class which is rapidly increasing, and by its increase tends towards superficiality. Manuals are apt to prevent rather than provoke research. The author in his preface tells us that the book is "a protest against the mysticism and charlatanry which have ever hung around the literature and practice of electro-therapeutics." With admirable terseness he discusses the department of electro-physics, making some good suggestions as regards the requirements for a properly constructed and useful battery. He states in considerable detail his experiments in nerve and muscle tracings, which are not essentially different from those of DuBois Raymond, as referred to in Foster's Physiology; in this connection he furnishes some very creditable myogrammatic representations.

The author further tells us in the preface that "the book is intended to narrow the subject" (electro-therapeutics) "down to the comprehension of the average student and general practitioner." Narrowing down a general subject in a general treatise, as this work purports to be, is not always the best way of imparting reliable information. This proposition is emphasized when, on page 62, we read: "Under 'treatment' will be discussed *only** therapeutic applications of electricity which the writer himself has proved of undoubted utility in his practice;" and further along on the same page this statement: "We may premise these remarks by saying that, in our opinion, *by far the most brilliant curative results brought about by electricity depend on its power to excite muscular contractions.*"

Working from this premise, the author omits very much necessary information as regards electro-therapeutics, as well as gives the reader the experience of but one man.

* Italics his own.

Furthermore, some few contradictory statements mar the feeling of certainty with which one likes to read a work upon a scientific subject; *e. g.*, on page 18 the author advises many small cells of high internal resistance, and on page 19 suggests a modified Smee's cell as such, while on page 33 he speaks of the same cell as having low resistance. Several, possibly, misprints make the author say what he does not seem to mean.

On the whole, the book cannot be commended to students as a manual, while, so far as it goes, it is a pretty safe guide for the general practitioner. E. A. BARTLETT.

MEDICAL NEWS.

ALBANY MEDICAL COLLEGE.

The class of '85 have elected the following officers: President, Andrew C. Crounse, of Knowersville; vice-president, Albert Marsh, Albany; secretary, Adelbert E. Moody, Saranac Lake; treasurer, Edwin A. Miller, Meredith, N. Y.; valedictorian, James P. Marsh; essayist, Charles W. Geel, Albany; orator, Irving S. Edsall, Prattsville; class editor, John D. Whish, Albany; historian, Howard J. Wood, Troy; poet, Silas H. Parks, Great Barrington; chaplain, Rev. Adolf Friedman, Albany; marshal, Elmer A. Blessing, Albany.

The Junior class, '86, of the Albany Medical College have elected the following officers: R. A. Woodruff, president; E. T. McIntosh, vice-president; Edwin M. King, secretary; W. G. Steel, treasurer; A. H. Hoadly, historian; Robert Palmer, marshal.

ALBANY COLLEGE OF PHARMACY.

The College of Pharmacy formally opened its fourth course of lectures Tuesday evening, October 6. The attendance of students, physicians, druggists and friends of the institution was unusually large. The Rev. George W. Dean, chancellor of All Saints' Cathedral, opened the exercises with prayer. Prof. Willis G. Tucker, president of the faculty, after a few remarks, introduced Prof. A. B. Huested, who delivered the opening address (see page 294). Dr. David Murray, secretary of the State Board of Regents, was then introduced, and reviewed the work accomplished by the college.

ANTI-METRIC SYSTEM.

At a meeting of the [Anti-Metric] "International Institute for Preserving and Perfecting Weights and Measures," in Cleveland, O., Wednesday evening, September 24, a letter was read from Mr. George C. Mason, secretary of the American Institute of Architects, requesting that a delegate might attend the meeting of architects at Albany, Wednesday, October 22, to read a short paper and to give an oral description of the work of the International Institute. Mr. H. C. Wood, of Sharon, Penn., was appointed as such delegate. The French metric system will probably be a prominent topic at this convention.

The Albany Institute invited the Medical Society of the County of Albany to be present at the institute meeting on Tuesday euening, October 7, to listen to Dr. Carroll, secretary of the State Board of Health. THE MEDICAL ANNALS, as the organ of the Medical Society, acknowledges this act as a fraternal courtesy.

The American Public Health Association meets in St. Louis, Tuesday, October 14. The name of the late lamented Dr. Elisha Harris, of Albany, appears in the lists of several of the standing committees, with an asterisk to indicate "deceased."

PERSONALS.

MARRIED.—Dr. George S. Munson, '79, of 138 State street, Albany, was married to Miss May S. Downing, daughter of George Downing, Esq., of Albany, on Tuesday evening, October 7, 1884.

Dr. George Henry Houghton, '82, was married Wednesday, October 8, at 11 A. M., to Miss Katie L. Bowen, at the Hudson Avenue Methodist Episcopal Church, Albany.

DIED.—At the residence of her son-in-law, Frasier Spraker, at Palatine Bridge, October 6, 1884, Mrs. Ann Ver Planck, wife of Dr. Benjamin B. Fredenburgh, aged 85 years.

Another of the old residents of Albany county has passed away. Ann Ver Planck, wife of Dr. Benjamin B. Fredenburgh, of Coeymans, and daughter of Mayor Isaac D. Ver Planck, one of the original granters and proprietors of the Coeymans patent, died on the 6th instant, at the age of 85 years. Mrs. Fredenburgh, at the time of her decease, had been spend-

ing a few weeks with her only daughter, the wife of Frasier Spraker, of Palatine Bridge. She was married to Dr. Fredenburgh in 1823, and had her life been prolonged two days further, she would have arrived at the sixty first anniversary of her wedding. She was a woman of culture and refinement, a devoted wife and mother and a consistent member of the Reformed church. Besides her husband, she leaves three generations of descendants to mourn her loss.—*Albany Journal.*

Dr. John M. Dwan, '60, died at Pleasant Valley, N. Y, March 26, 1884, aged 50 years. He practiced medicine in Pleasant Valley since 1860. His wife, Mary R., daughter of Rev. B. F. Wile, survives him with one son.

Died, at Green Island, September 30, Sarah Louise Killip, wife of Dr. John E. Hall, A. M. C., '77.

Dr. Isaac J. Moxley, '53, died October 12, in Bangor, about six miles west of Malone Village, Franklin Co., N. Y. On Wednesday, October 8, he bought three grains of strychnine at Sawyer's drug store, in Malone. On Sunday morning he dressed himself at about five o'clock, and swallowed the fatal dose in his barn. He was discovered before life was extinct, and a physician was summoned, but he soon expired. He acknowledged that he had taken poison, but gave no reason for the act. He had sold his hops a day or two before, and was in comfortable circumstances.

Dr. Alfred Ludlow Carroll, secretary of the State Board of Health returned to his office September 23, after an absence of a couple of months in Great Britain. He spent most of the time with eminent sanitary authorities, studying methods and experiences there in sanitary work. He especially gave attention to sewage disposal, which is now confronting sanitarians with perplexing problems.

Dr. F. C. Curtis, of Albany, was received into active membership in the American Dermatological Association, at the eighth annual meeting, held at Highland Falls, N. Y., August 26 and 29, 1884.

Foreign Travel.—Dr. Howard S. Paine returned September 22, from a tour of three months through middle Europe, with a company of thirty-five persons, under the care of Professor and Mrs. De Potter, Dr. Paine acting as medical adviser and assistant to the party.

The itinerary embraces an extensive tour, and is designed to include in its scope a visit to as large a number of the principal

cities and places of historical interest as possible, and at the same time afford opportunity for witnessing the grand landscape views obtainable only at various localities in central Europe, and as at first proposed was followed throughout, with only slight changes in order to avoid detention by quarantine enforced at one or two points.

There was sufficient time while in the larger cities for visiting the old and world-renowned universities, cathedrals, hospitals, celebrated galleries containing a profusion of the richest collections of art, and many other noted buildings and places.

The modes of travel comprised every variety of vehicle—the ponderous steamship, the cars the *diligence,* the gondola and even mule-back rides.

The landscape views obtained along the route embraced great variety and striking diversity—the lowlands and dykes of Holland in contrast with the heather-covered hills of Scotland; the vine-clad slopes of sunny Italy and the snow-capped peaks of Switzerland, afford unusual facilities for enjoying a wealth of beauty and grandeur unsurpassed by any other locality in the world. Indeed, the attractiveness of the beautiful and picturesque scenery of these places, changing every day as the party passed from point to point, constituted the principal charm of the tour, frequent and ample opportunities being afforded for visiting the most desirable localities whence the most extensive range of vision could be obtained. These embraced the more noted lakes and mountains in Germany, Italy, Switzerland, France, England and Scotland.

The expected advent and fear of the general prevalence of cholera awakened alarm on the part of the traveling public to such an extent as to largely diminish the number of visitors which usually crowd into Italy and Switzerland during the summer months, and this season these countries were almost deserted. On this account those who were fortunate enough to visit these localities were the recipients of a greater share of attention and had better accommodations than usual at the different hotels.

While the number of visitors to the continent was diminished, those to England and Scotland were increased to such an extent as at times to make it difficult to secure hotel accommodations.

The tour was a delightful one throughout, and was in every respect successful, instructive and entertaining, combining sightseeing, pleasure and study.

Thus the time, far too short, rapidly passed, and all returned refreshed and benefited in mind and body, cherishing in memory pleasant associations of the tour, and indulging the hope of its repetition at no distant period.

Dr. Frank B. Sutliff, '78, has removed from Winters, Cal., to Wailukee, Manitoba.

Dr. E. E. Brown, '79, has moved from Bethlehem Center, and is now engaged in the practice of medicine at No. 124 Hamilton street, Albany.

Dr. E. C. Hallenbeck succeeds Dr. Brown at Bethlehem Center, N. Y.

Dr. Meyer L. Rhein, '80, D.D.S., is practicing his specialty at No. 7 West 38th street, New York.

Dr. Martin J. Dwyer, '83, completed his service in the Albany Hospital September 30, and is now in practice in Liberty, Sullivan Co., N. Y.

Dr. F. T. (not S.,' as was incorrectly printed last month) De Lano, '83, is about to remove to Crown Point Centre, Essex Co., N. Y.

Dr. N. E. Heath, '83, has moved from Albany to Stockbridge, Mass.

Dr. J. W. Poucher, '83, has moved from North Egremont, Mass., to Modena, Ulster Co., N. Y.

Dr. Irving D. LeRoy, '83, has moved from Poughkeepsie to Pleasant Valley, Dutchess Co., N. Y., succeeding to the practice of the late Dr. John M. Dwan, '60.

Dr. Edmund F. Bronk, '84, of New Baltimore, N. Y., who has been in Berlin for several month past, is now attending lectures in Prague University (Lying-in Hospital).

Dr. John V. Hennessey, '84, has resigned as senior assistant resident physician in St. Peter's Hospital, Albany, and is practicing in Little Falls, N. Y.

Dr. James W. King, '84, entered the Albany Hospital as junior resident physician, October 1.

Dr. Jacob A. Rich, '84, has moved from North Easton, Washington Co., to Pittstown, Rensselaer Co., N. Y.

Dr. G. H. McTammany, '83, has moved from Troy to Cohoes, N. Y.

THE

MEDICAL ANNALS:

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SEWAGE DISPOSAL AND CONTAMINATION OF WATER SUPPLY.*

BY ALFRED LUDLOW CARROLL, M.D.,

Secretary and Executive Officer State Board of Health, New York.

If man lived in a state of nature, as do the lower animals, with few and simple wants and an almost unlimited range of nomadic existence, the question of sewage disposal would never have given birth to contentious generations of sanitary engineers and chemists with conflicting theories and practices and patented processes for various and contradictory purposes; nor would the plumber's traps allure us to physical and financial ruin. But civilization, by increasing our comfort — that is to say, by multiplying our desires and bringing all the resources of art to gratify them — has also enormously increased our wastes, whilst the permanent concentration of population in households and communities has diminished our facilities for safely disposing of such wastes. The greater the population to the acre, and the more prosperous, the greater are the difficulties of this problem; and, paradoxical as it may seem to some of my hearers, it is really easier to obtain the luxuries of life than to get rid of them after we have temporarily enjoyed them. The invention of clothing and the cultivation of cleanliness have entailed what some of our adopted citizens regard as unnecessarily profuse use and consequent fouling of water for washing purposes; our fondness for varied dishes and fastidiousness as to their cooking

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have led to an enormous increase of kitchen refuse; our omniverous propensities and our domestication of brutes have given rise to slaughter-houses, hog-pens, stables and manure pits; and so on, throughout the whole scale of modern life, the more we flatter ourselves on our æsthetic progress, the more nuisances do we involuntarily create.

As regards the human body itself, you all know that its composition is unstable and ever changing. Effete particles, the by-products of vital processes, and the innutritious or superfluous ingredients of food are constantly cast off, the solid and liquid portions of such excreta amounting respectively to about three ounces and forty ounces daily, or altogether nearly one-third of a ton annually. Human dejecta are undoubtedly most apt to convey certain specific infections and, apparently, to excite morbific putrefactive changes in other accumulations of dead organic matter; but a great mistake is often made by superficial theorists in regarding them as the only things to be dealt with; and this error has in many instances induced the adoption of dangerously inefficient methods of disposal; for, in reality they constitute, at the most, scarcely one-two-hundredth part of the deleterious household waste, of which public health demands the speedy removal from inhabited places. In the words of the report of the British Army Sanitary Commission in relation to the sanitation of troops in India, "For every pound of human excreta removed under the dry earth system, there are in every well-regulated establishment about 190 of fluid refuse which must be otherwise disposed of;" and, strange as it may seem, there is practically but little difference in the sewage of towns, whether excremental matter be admitted or excluded.

Sewage, then, as I have already hinted, is to be considered as a composite and variable thing, comprising, in addition to excreta, animal and vegetable matter from kitchens, fouled water from laundries, baths, and other house-slops, often containing most noxious animal products; wastes from manufactures of different kinds; in brief, all the filth-residua of households or communities. Or, to use the definition of the Rivers Pollution Commission, in 1868: "Sewage cannot be looked upon as composed solely of human excrement diluted with water, but as water polluted with a vast variety of matters, some held in suspension, some in solution."

Of course, the amount of dilution varies with the quantity of water supply, and, in cities where storm-water is admitted to the sewers, with the quantity of rainfall. It is almost needless to remark that all the water used in a household must in some way be discharged from it; and consequently, under the "separate system" of sewerage, from which surface and ground water are excluded, the volume of sewage can be closely estimated by the water supply. This in most British towns is calculated at about twenty gallons for each person daily. In this country, wherever public water-works exist, the consumption is much greater, the average New York citizen using, or wasting, more than four times as much as his London cousin. In families dependent on private wells or cisterns, the amount of water used is more variable; but the average may be assumed to be not less than twenty to twenty-five gallons per head.

Now one of the most perplexing questions among sanitarians is how to get rid of all this refuse matter in the safest and least expensive manner. Both the suspended and dissolved matters in sewage are of a rapidly putrescible character, and the products of their decomposition are dangerous to health if they contaminate soil, air or water. Our object, then, is to carry them away from our domiciles before decomposition sets in, and to place them where they will do the least harm, if not the most good.

The worst imaginable method of getting sewage out of sight, and out of unthinking mind, is the one, unfortunately, most commonly adopted, not only in isolated houses and small villages, but even in many cities, namely, the storage of it in leaching privy-vaults or cesspools, wherein its foul fermentation is intentensified and its most evil tendencies developed. The liquefied filth from these soaks through the soil for wide distances around, poisoning with its exhalations the ground-atmosphere, which is often drawn into the basements of ill-constructed houses, and polluting the wells in the neighborhood. The extent of such percolation will, of course, vary with the character of the soil; but I have personally known it to reach over seven hundred feet, and instances of even farther soakage have been recorded. In the majority of cases where diarrhœal disorders and other filth-diseases prevail in unsewered localities, the cause may be traced to such contamination of wells; and where the germs of specific maladies find entrance the results are still more disastrous.

Nearly a hundred epidemics of cholera and typhoid fever have been demonstrably due to this one cause; the most notable example, perhaps, being the outbreak of cholera disseminated from the historical pump on Broad street, London, in 1854. From a sanitary as well as an economic point of view, therefore, this method of sewage disposal is to be mentioned only to be unconditionally condemned; and it is to be hoped that public enlightenment will soon induce its abolition. Our local sanitary authorities can do nothing more important for the public welfare than to insist on the abandonment of this abomination, or, at all events, to prohibit its extension.

Various plans have been recommended for what is technically termed the dry-disposal of excreta. The simplest of these is the dry-earth system, using either a small and shallow cemented pit, a box or other receptacle above ground, or one of the more elaborate patterns of earth-closets. This system, as has already been stated, deals with only the one hundred and ninetieth part of our waste, and, although it may be practicable for single houses or for very small hamlets, the difficulty of carrying it out on a large scale is almost insurmountable. It has been estimated that for a population of ten thousand more than a hundred tons per week of dry earth would be required, and the supply and removal of such a quantity in any but a sparsely settled agricultural district would involve expensive machinery. It is quite a mistake to imagine that the fertilizing power of this earth will compensate for its transportation to any distance. Even after it has been re-dried and used several times it is no richer than ordinary garden soil, and is absolutely worthless as manure.

In many places the pail- or tub-system is used with more or less satisfactory results, movable receptacles receiving the excreta, with or without the admixture of ashes or other deodorant or absorbent substances, and being removed once a week or oftener by the public authorities. In Glasgow and some other places these pails are employed without a disinfectant; in Edinburgh and Nottingham other house refuse and ashes are received in the same vessel; in Manchester, Leeds, Rochdale, and elsewhere, sifted ashes or some form of antiseptic are added; at Salford deodorization is effected by charcoal made from street sweepings; in Halifax the "Goux" tub, lined with straw, chaff or other absorbent material mixed with a little lime- or iron-

sulphate, is adopted; and other modifications of this method are in operation in different places. Although by these means the most manifestly offensive ingredients of our sewage are removed, and may be converted readily into manure, they are all open to the same objection, in that they fail to provide for other and more voluminous house wastes which may be almost as deleterious. Indeed, in all large communities where such "dry methods" are employed it is found necessary to have a system of sewers in addition. The same criticism applies to the abominable "fosses permanents" of Paris and Brussels and to Lieurnur's pneumatic system.

We now come to the method of "water-carriage," which, for household health and convenience, is preferable to any other, inasmuch as, with a sufficient supply of flushing-water, it will carry away all the dissolved or suspended organic matters of which we wish to get rid. The principal question which confronts us is what final disposition to make of our sewage after it has traversed the sewers. The usual plan in this country, and formerly everywhere, is to discharge it in all its native impurity into the nearest body of water. Thus, about two million gallons of sewage are daily poured into the Hudson river above Albany to give flavor to the drinking water which the capital city is at much expense to pump up from that stream; and Albany herself ejects her own refuse into the same channel for the behoof of thirsty souls below, heedless if some of her waste fluids regurgitate into her own pumps. The Clyde at Glasgow, and the Liffey as it runs through Dublin, are foreign examples of how dirty rivers can be made by even a part of the city sewage; but fortunately their waters would not be potable under any circumstances. As the dangers from such pollution of streams assumed greater magnitude, plans were suggested and tried for the purification of sewage, including the idea of utilizing its manurial constituents. At first, in ignorance of the fact that the matters in solution are quite as injurious to health, and about eight times as valuable for fertilizing purposes, as the suspended matters, a mere straining process was attempted, the solid particles being thus intercepted and sold, whilst the fluid effluent was allowed to pollute streams to almost as great a degree as before. Chemistry next attempted to separate by different methods of precipitation the dissolved as well as the suspended matters, and hence arose a number of processes, such as the "A, B, C," Holden's,

Blyth's, Whitthread's, Scott's and many others, nearly all of which have conspicuously failed either to produce a fertilizing value at all commensurate with their cost, or to render the effluent sufficiently pure for safe admission into streams. Sewage, in its average state of dilution, according to Corfield, contains, in every one hundred thousand parts, about seventy-two of total matters in solution, including "between four and five of organic carbon, something over two of organic nitrogen, from six to seven of ammonia, and from ten to eleven of chlorine." Beside these, there are about twenty parts of suspended organic matters. It is evidently almost impossible to separate all these elements from so great (or often much greater) dilution by any chemical treatment within reasonable cost.

The plan most recently advocated by many sanitary engineers to combine purification with utilization of sewage is by filtration through properly prepared land, the greater part of the organic matter being taken up by vegetation, as in the different methods of "sewage-farming," whilst the residual impurities are supposed to be oxidized in the interstices of the soil. For let me here remind you that when we talk of dry earth as a purifying agent it is not the earth itself, but the air contained in it, which is the actual disinfectant.

To carry out this plan, divers engineering devices have been essayed. "Subsoil irrigation," by distributing the sewage through agricultural drains below the roots of vegetation, while it may supply a certain amount of nutriment to plant-life, cannot purify the effluent thoroughly, and is applicable only on a very limited scale. Surface irrigation is more effective, provided that the soil be of a fit nature, deeply underdrained to insure its complete aeration, of sufficient acreage to permit alternate use of different portions, and that the sewage be delivered fresh and with but little mechanically suspended matter. The capacities of sewage-farming were at first much overrated, and experience shows that in the best fitted soils an acre should be allotted for every thirty-five or forty of the population. Even this estimate is based upon a calculation of from twenty-five to thirty gallons of sewage per head daily, which is regarded as the most desirable degree of dilution for agricultural purposes; but the actual quantity in most large towns greatly exceeds this, through the addition of storm-water. The "separate system" of sewers, excluding surface water and ensuring a more uniform composi-

tion of their contents, would render this part of our problem somewhat simpler. But the manurial value of sewage, as thus treated, is but a few cents per ton, and, where large cities are concerned, the cost of its carriage and the high price of land in the vicinity forbid any expectation of pecuniary profit from the transaction, and we must consider any incidental return merely as a partial reduction of the expense of a necessary sanitary work. The city of New York, for example, would require about 35,000 acres to satisfy the ideal conditions which I have stated; Albany would demand nearly 2,500 acres. Moreover, since the sewage must filter *through* the soil, our severe winters, with frost penetrating the ground to the depth of several feet, and with the entire absence of vegetation, militate against the success of this system. And even in summer-time the effluent water has not always been found pure enough for safe admission into streams; in more than one instance typhoid fever has been produced by drinking such effluent from badly managed irrigation farms. Dr. Thudichum, one of the highest living authorities in physiological chemistry, and himself an advocate of this method of sewage-disposal, thus sets forth the present aspect of the case:

"Practically, however, sewage utilization has met with many hindrances, and is hardly carried out completely anywhere. It mostly in practice amounts to this, that the sewage on leaving the town is strained, or freed from suspended matter by short repose, or by the addition of precipitants, clay, sulphate of alumina, blood, charcoal, lime and other matters, and the liquid decanted from the precipitate is now distributed over fields and meadows, to irrigate them, or is allowed by permission of authorities to flow into water courses as "purified effluent." This latter effluent defiles the Thames and Lea, and is one of the principal objections to the use of the Thames and Lea water for drinking, as the sewage is not strained but allowed to run on land directly, when the solid matters easily cause a nuisance, or are deposited as a surface layer, which becomes gradually impenetrable to water. If the surface be taken off, or dug under, and the soil be permeable, or be made so by construction, a very good filter bed for sewage utilization can be produced. If the sewage is poured on such a filter bed at intervals, so that the porous ground can be penetrated by air after the sewage has percolated, so-called *intermittent sewage filtration* is produced. Many fields which have been allotted to sewage utiliza-

tion are either naturally unfit for it, or have not been suitably prepared, and in consequence the process either fails in part, or becomes injurious. But there is no difficulty in sewage utilization by irrigation which cannot be overcome by skill and perseverance. For example, chalk soil will absorb any amount of sewage at all seasons and in all weathers; sand and sandy soil with good drainage will do the same; gravelly soil the same; only heavy clay soil is not suitable, and lets much sewage run over its surface unpurified. If such soil is the only one at disposal, it must be prepared by an admixture of gravel and sand and by underdraining. Practically, much sewage continues to run into rivers, even when sewage purification is obligatory and is practiced during rainy seasons and storms, when the processes and machinery are unable to deal with the enormous volume of sewage suddenly produced."

From the numerous places which I have examined abroad, a few may be briefly described as typical examples of the modes of sewage-disposal just mentioned. At Birmingham the pail-system is used for the majority of the households, the excremental matters and solid house refuse being collected by carts and subjected to treatment by heat, the vegetable fibre being carbonized, the fertilizing materials mixed with the resulting charcoal and thus converted into poudrette, and the combustible remaining rubbish burned. A similar plan is adopted in Manchester, Leeds, and more lately in Glasgow (*v. Sanitary Record*, Sept. 15, 1884). The rest of the sewage of Birmingham, including liquid house wastes and street washing, and the discharge from about 8,000 water-closets, is conveyed by sewers to an outlet on the outskirts of the city. Here milk of lime is added as a precipitant, and the sewage discharged into a series of settling tanks, flowing slowly from one to another over weirs. The effluent from the last of these tanks is dispersed over a sewage farm of about 1,000 acres by irrigating trenches so arranged that different sections can be alternately flooded. The precipitated solids or "sludge" are removed from the tanks about once a fortnight and spaded by hand into another portion of the farm. This latter part of the procedure is decidedly malodorous, though the filled tanks themselves and the irrigated land give rise to surprisingly little smell even in warm weather. The water surplus, clarified by filtration through the soil, flows into the river.

At Coventry, sewage-farming, properly so called, is not attempted, the land being avowedly used only for filtration.

The total sewage is conveyed by a main sewer to Whitley, a suburban district, where the solid excreta and garbage are screened out and mixed with "sanitary carbon" to produce an odorless manure. The screened sewage is then mixed with sulphates of alumina and iron, and has subsequently enough lime added to neutralize its acidity. It is then passed into a series of large tanks wherein rapid precipitation occurs, and the effluent is conducted to the "filter-beds," comprising about nine acres of land, from which it passes by a central drain into the river Sherbourne. The precipitated sludge is here ingeniously freed from its moisture by powerful machinery and compressed into dry cakes, which are easily portable and are said to find ready sale.

The effluent from these processes, although apparently clear, still contains some organic matter, and the river water with which it is admixed shows an abundance of microscopic organisms. From a sanitary point of view, therefore, the danger of contamination of drinking water is not obviated in this way, and where a large volume of sewage is to be managed I doubt if it ever can be. In fact, as population increases I believe that the use of water from streams for potable purposes will have to be abandoned. Especially in the case of navigable rivers, even setting aside the pollution by town sewage, the immense traffic in boats, each with its latrines and other wastes, would constitute a considerable objection. Purer sources of water supply should be sought by every community, and these are in almost all instances easily to be found. But for their maintenance it is indispensable that the municipality or its agents should have control over the watershed which surrounds them, in order to avert the ubiquitous menace of sewage contamination of springs or storage reservoirs. In the present state of our knowledge concerning the rapid multiplication of the bacterial organisms which are intimately associated with the causation and conveyance of epidemic diseases, we can scarcely conceive of any amount of dilution that will render them innocuous. Many examples of transmission of filth-diseases in almost homœopathic dilution are familiar to sanitarians, one of the most striking having occurred a few years ago at Caterham, where a severe outbreak of typhoid fever was unmistakably traced by Dr. Thorne to the water supply brought by mains from one of the great wells, over five hundred feet deep, belonging to the Cater-

ham Waterworks Company, which had been accidentally polluted by the discharges from a single workman suffering from a mild attack of the malady.

If the domestic use of river water were abandoned, chemistry might furnish us with methods for disposing of sewage in a comparatively inoffensive way. In London, with a minimum volume of about 160,000,000 gallons a day, the sewage is carried by the great sewers of the Thames embankment some twelve miles to huge storage reservoirs at Barking and Crossness, on opposite sides of the river, where it is treated with one grain per gallon of sodium manganate and a few grains of chloride of lime, and discharged at ebb-tide into the stream. Although, from the quantity of suspended matters, there may be some silting of the river-bed, and other objections may be reasonably advanced, I can, from careful personal inspection, vouch for the entire deodorization of the sewage by this process, and confidently assert that it is the least of the many nuisances which infest the banks of the Thames.

Mr. Dibdin, consulting chemist to the Metropolitan Board of Works, to whose skill and energy is due the successful working of the method which I have just described, has kindly furnished me with the following memorandum of a still more effective process for precipitation of suspended matters and purification of the effluent:

"To each gallon of the raw sewage add 3.77 grains of lime previously dissolved in water. This should be thoroughly incorporated with the sewage, which should then have an alkaline reaction. Now add one grain per gallon of protosulphate of iron, and agitate. One hour is sufficient for subsidence of suspended matters. The above quantities may very likely require to be increased or decreased for various sewages; but they are sufficient for that of London." The effluent he would filter and disinfect with sodium or potassium permanganate before discharging it into the stream, and he adds that, for such filtration, "porous earthenware, or common ballast, ignited in a close retort with carbonaceous animal or vegetable matter, will form an admirable substitute for animal charcoal." It would be greatly to the advantage of Albany if this not very expensive experiment could be tried at Troy.

What synthetical chemistry may ultimately do with our refuse must be a question of surmise rather than of prophecy.

Oleomargarine was originally made from the sewage of Paris, but recent legislative enactment has deprived us of this mode of sewage disposal. It is within the range of possibility that some delicate perfumes or choice flavorings may be derived from the products of organic decomposition, just as we owe our most brilliant dyes to what was once deemed a useless mineral waste. In fact, some of the flavoring essences which we purchase from our grocers have quite as unsavory an origin.

Meanwhile, the most practicable method of getting rid of our organic wastes (for get rid of them we must at any cost) seems to be to burn as much of them as possible. Cremation is the manifest destiny of organic matter in all thickly populated places. It means a rapid and innocuous, instead of a slow and possibly dangerous, process of oxidation. In either case organic substances are never destroyed, but their chemical combinations are changed, and their elements are sooner or later utilized in nature's great laboratory. In several of the systems of which I have spoken such rapid combustion of all available solids plays a prominent part, and its operation will doubtless be extended in the future. Mr. Bailey Denton, though one of the strongest upholders of sewage-farming under ordinarily favorable circumstances, proposes to deal with the sewage of London by carrying it farther down the banks of the Thames and regulating the velocity of the outflow so that the mineral matters shall be deposited on the low lands, whilst the lighter organic substances may be intercepted or precipitated beyond and burned. A recent number of the *Sanitary Record* states that "experiments are now being made in the provinces and also near London to burn and carbonize such material as would be difficult otherwise to get rid of in an unobjectionable form. Vegetable matter is, of course, by these means easily reduced to charcoal, but road sweepings in London in wet weather contain 43 per cent. of abraded stone and iron, and these, with other mineral substances which would be included in the general dust-heap, can be burned and ground to form a good building mortar." The same issue contains an explantion of a newly invented "refuse destructor," which promises effectually and speedily to dispose of "all descriptions of the most objectionable matter produced by the town, such as offal from slaughter-houses and fishmongers' shops, garbage, ashpit contents, street-sweepings, etc.," without smell or residue and at comparatively small expense. With all these

methods, however, it is to be borne in mind that an immense residue of certainly foul, and possibly disease-producing, fluid is left unprovided for, and that the risk of contamination of our water supply is still to be jealously guarded against.

With the reservations which I have endeavored to impress concerning the domestic use of water in any way exposed to even the smallest degree of pollution by excremental refuse, I may end by quoting the conclusions of the Conference on the Health and Sewage of Towns, held in 1876, as follows:

"In certain localities, where land at a reasonable price can be procured, with favorable natural gradients, with soil of a suitable quality, and in sufficient quantity, a sewage farm, if suitably conducted, is apparently the best method of disposing of water-carried sewage. It is essential, however, to bear in mind that a profit should not be looked for by the locality establishing the sewage farm, and only a moderate one by the farmer.

"With regard to the various processes based upon subsidence, precipitation, or filtration, it is evident that by some of them a sufficiently purified effluent can be produced for discharge, without injurious result, into water-courses and rivers of sufficient magnitude for its considerable dilution; and that for many towns, where land is not readily obtained at a moderate price, those particular processes afford the most suitable means of disposing of water-carried sewage. It appears, further, that the sludge, in a manurial point of view, is of low and uncertain commercial value; that the cost of its conversion into a valuable manure will preclude the attainment of any adequate return in the outlay and working expenses connected therewith, and that means must therefore be used for getting rid of it without reference to possible profit.

"In towns where a water-carried system is employed, a rapid flow, thorough ventilation, a proper connection of the house drains and pipes with the sewers, and their arrangement and maintenance in an efficient condition, are absolutely essential as regards health; hitherto sufficient precautions have rarely been taken for efficiently ensuring all the foregoing conditions.

"With regard to the various dry systems, where collection at short intervals is properly carried out, the result appears to be satisfactory, but no really profitable application of any one of them appears as yet to have been accomplished.

"The old midden or privy system in populous districts should be discontinued, and prohibited by law.

"It was conclusively shown that no one system for disposing of sewage could be adopted for universal use; that different localities require different methods to suit their special peculiarities; and also that, as a rule, no profit can be derived at present from sewage utilization.

"For health's sake, without consideration of commercial profit, sewage and excreta must be got rid of at any cost."

THE NEW ANÆSTHETIC—CHLORIDE OF COCAINE.

BY SELWYN A. RUSSELL, M.D., A. M. C., '77, ALBANY.

[FOR THE MEDICAL ANNALS.]

The prominence to which Coca* has suddenly risen on account of the very recent and important discovery that a few drops of a two-per-cent. solution of the chloride of cocaine (chief alkaloid of coca) instilled into the eye some minutes before an operation would render it insensitive to pain, is my apology for the following brief review of the history of the plant.

Coca is a shrub native to South America, especially Peru, Bolivia, and adjoining states, where it grows wild, and is also largely cultivated on extensive plantations. It is propagated from the seed, grows to a height of from four to six feet, has a leaf similar to the tea leaf, begins to yield within two years, and continues productive forty years and upwards. The leaves are the part used; they are stripped from the branches as many as three or four times a year, and after careful drying in the sun are packed in bundles or sacks of about twenty-five pounds each.

Coca was used by the aborigines of Peru long before their conquest by the Spaniards early in the sixteenth century. They regarded it as a divine gift, employed it in religious ceremonies, and spoke of it as "that heavenly plant which satisfies the hungry, strengthens the weak, and makes men forget their misfortunes." In its native country it is now used as we use tea, and the odor, taste and appearance of the infusion are comparable to those of tea; also the leaves are chewed and the juice mostly

* Coca should not be confounded with cocoa or cacao, the plant from which chocolate is derived. *Cuca*, the aboriginal name given it by the Peruvians, was changed to coca by the Spaniards at the time of the conquest. Sir Robert Christison protested against the name coca because of its resemblance in spelling and pronunciation to cocoa, an entirely different plant.

swallowed. The coca-chewer carries suspended from his neck a bag of leaves and a small flask of ashes or lime. After having withdrawn the filaments from a handful of the leaves, he chews them until they are reduced to a pulp; this he forms into a ball and then mixes with it a small quantity of the lime or ashes to give it a relish. This quid he retains in the mouth an hour or so, and it is then renewed with fresh leaves. A few of the inhabitants are addicted to an excessive use of coca, more especially because of its exhilarating effect on the mind, and those thus abusing it do indeed secure mental tranquility, but therewith ill-health and mental and moral imbecility. The annual product of coca is estimated at 40,000,000 pounds, and this is consumed by 10,000,000 people.

The natives use coca as a mild stimulant to both the mind and body. It relieves one from the sense of fatigue, and suspends hunger while its effect lasts. It accelerates the heart's action and increases its force, stimulates respiration, and a feeling of well-being, contentment and buoyancy takes possession of the mind. The pedestrian Weston was detected chewing coca during one of his walking feats in London a few years ago. It is said to diminish the excitability of the motor nerves and impair the power of coördination. Its influence on the sensory nerves depends on the quantity ingested; a small amount increases the excitability, whereas a large quantity causes paralysis. Like tea and coffee it lessens tissue waste; hence a less quantity of food is necessary to maintain the bodily functions. It is recommended in phthisis and wasting diseases generally; is valuable in migraine, the nervous form of sick-headache; has been used in the depression following the withdrawal of opium in the treatment of the opium habit, also in melancholia. Its principal effects, however, are that it enables one to endure unusual fatigue, dulls the sense of hunger and gives freedom from mental hebetude. Sir Robert Christison, who tested its action on himself among the highlands of Scotland, observed that it entirely prevented the fatigue which follows pedestrian exercise and staved off hunger and thirst during its action. It had no effect on his mental faculties beyond liberating them from the dullness and fatigue which exercise occasions. Its excessive use is harmful, but it may be assumed that it, like tea and coffee, opium and alcohol, may be injurious or beneficial according to the manner of using it. The dose is stated to be two drachms in infusion.

The preparations of coca in the market are almost altogether inert. The writer found the fluid as prepared by three different well-known chemists quite without effect when taken internally, as was also the dialysate. Squibb has abandoned the manufacture of any preparation for the reason that, as he asserts, no good, fresh and carefully prepared leaves are obtainable in the market.

Coca was first fully investigated by Dr. Niemann, of Germany, in 1860, and it was he who gave the name of *cocaine* to its principal alkaloid, though he was not the first to isolate it. The chemical formula of cocaine is nearly identical with that of theine, caffeine, theobromine, and the physiological effects of these alkaloids are very similar. In the fourth edition (1860) of their Materia Medica Rossbach and Nothnagle referred to the therapeutic use of this drug in the following words: "Thus far cocaine has found no medical application, but on account of its extraordinary effects on the nervous system, respiration, on the action of the heart, as well as for its *local anæsthetic effect on mucous membranes*, it merits trial in a variety of diseases." It was known as long ago as 1868 that the topical application of cocaine reduced sensibility, but Anrep's experiments, upon which the above observation as to its local effect was based, showed that injections under the skin, as well as the external application to mucous membranes, not only reduced sensibility, but caused local anæthesia and analgesia. Fifteen minutes after a solution had been applied to the tongue Anrep could not distinguish sugar from salt, nor did the prick of a pin cause any sensation. It has been used upwards of a year by laryngologists to dull and abolish laryngeal sensibility in examinations and operations. In view of the foregoing, the wonder is not that its use in ophthalmic practice has been at last discovered, but that the discovery was not made long before.

It was Dr. Koller, of Vienna, who conceived the idea of applying it to the eye, and after various experiments on animals he found that a two-per-cent. solution of the chloride of cocaine dropped into the eye every five minutes for a period of fifteen or twenty minutes was sufficient to render the conjunctiva and cornea anæsthetic; to him, therefore, belongs the credit of this important discovery. His experiments were made about the first of September. He at once wrote a paper embodying the results of these experiments, and this paper was read by Dr. Brettauer, of Trieste, at the Ophthalmological Congress held at

Heidelberg, September 14 and 15. A solution, such as had been used by Dr. Koller, was sent with the paper, and this was used by Prof. Becker at the Heidelberg Eye Clinic and also on patients before the Congress, all experiments corroborating Dr. Koller's statements. Dr. H. D. Noyes, who occupied the chair during the meeting, communicated to the *Medical Record* (see issue for October 11) an abstract of Dr. Koller's paper, and that was the first information received on this side of the Atlantic of the use of this drug in eye operations. It was shown that the eye could be rendered so anæsthetic that the conjunctiva could be seized with forceps, the cornea rubbed with a probe, and operations done on these parts without causing pain. The time required to produce anæsthesia was from ten to fifteen minutes, and the effect passed off within half an hour.

Since American oculists have become aware of this discovery many of them have made additional experiments, all strongly confirming the original wonderful claims for the drug. In addition to the anæsthetic effect, it dilates the pupil and reduces, but does not wholly paralyze, the power of accommodation. A search through the principal home and foreign journals shows that cocaine has already been used in hundreds of operations and with no bad, though sometimes negative, result. Operations for strabismus, advancement, iridectomy, cataract, pterygium, removal of foreign bodies from the cornea, needling, tattooing, etc., have all been done repeatedly and almost invariably with satisfactory results. In photophobia and blepharospasm it has given complete relief, also in the pain from corneal ulcer; it has rendered painless the application of argentic nitrate solution to the eye, the actual cautery to the mucous membrane of the nose, and has relieved tympanic neuralgia.

In certain pathological conditions in which the inflammation is deep-seated, or the absorption of the drug is prevented, it may not be of practical use; such cases, however, form but a small minority of those treated by oculists. It is also true that there are variations of susceptibility to its influence, and in rare instances it produces little or no effect. This, as well as an insufficient use of the drug, may account for the negative results obtained now and then. The two-per-cent. solution causes no pain, no discomfort, no congestion, no immediate or subsequent bad effect.

Dr. Merrill, of Albany, has used it several times in most of the above mentioned operations, and in but two instances has

it failed to produce anæsthesia. He has also painlessly incised the tympanic membrane for abscess of the middle ear, after the use of the solution, and he found that one drop placed in the cavity of an aching tooth relieved the pain for several hours. The two failures mentioned were both in cases of iridocyclitis, and these he attributes to the fact that the eye in this disease, as is well known, is always exquisitely sensitive because of the intraocular inflammation. Through his kindness I had an opportunity to witness one of his operations for cataract. The patient was an old man and quite nervous, but he complained of no pain and made no movement during the operation, and when it was finished said he felt only a slight "stinging" when the iris was cut. Dr. Merrill's method of using the solution (two per cent.) is to instill into the eye two drops every two or three minutes till four applications have been made, then to wait ten to fifteen minutes before operating. He expressed himself as fully satisfied with the results so far, and felt convinced that the drug would become of great practical use.

Dr. T. F. C. Van Allen, of Albany, has used it in four operations, and with uniformly good results; in two operations for strabismus no pain whatever was felt when the tendons were cut. He observed reduced tension in two instances. He thinks a two-per-cent. solution preferable to a four-per-cent. used by some, inasmuch as the latter sometimes causes smarting.

Dr. Polk, New York, has reported two operations on the cervix uteri in which the solution rendered the parts insensitive during the greater part of the operation. At the Presbyterian Hospital a felon was painlessly opened after the affected finger had been for some minutes immersed in the solution. Dr. Knapp, by its use on himself, found that he suffered no pain during the passage of instruments into a sensitive urethra nor during the application thereto of a five-per-cent. solution of argentic nitrate; that it deadened the sensitiveness of the rectum; and abolished sense of taste and smell, as well as that of pain, when applied to the membranes of the mouth or nose.

Although the chloride of cocaine costs about one dollar a grain, its use is really not expensive, as but a few drops of the two-per-cent. solution are necessary to produce anæsthesia in ordinary operations. The cost will probably remain high, inasmuch as the leaves contain but a relatively small quantity of the alkaloid — said to be about one-fifth of one per cent.

There seems warrant for the statement that the employment of the drug in ophthalmic surgery is, perhaps, in point of importance, only second in value to that of ether and chloroform in general surgery, and there is reasonable ground for hope that its use may be extended to operations on all mucous membranes, if not also to minor surgical operations generally in which the superficial parts only are involved.

NOTE.—The fourth edition of Rossbach and Nothnagel's Materia Medica, referred to on page 335, was published in 1880, instead of 1860.

THE NEW ANÆSTHETIC.*

BY H. BENDELL, M.D., A. M. C., '62, ALBANY.

[FOR THE MEDICAL ANNALS.]

The interesting letter of Dr. Henry D. Noyes, dated at Kreuznach, Germany, and published in the *Medical Record* of October 11 of this year, directed the attention of the profession to the important, and, as is claimed, accidental discovery of the anæsthetic properties of the muriate of cocaine for operative purposes upon the cornea and conjunctiva of the eye. Cocaine, the active principle of the leaves of the Erythroxyolon Coca, is a plant indigenous to South America. The leaves of this shrub have been extensively used by the natives of Peru and Bolivia as a stimulant and safe beverage to increase bodily strength and fortify the system generally for the endurance of manual labor. It is is claimed that the effect of coca is exhilarating in producing muscular activity and in enabling the consumer, without detrimental influences upon the digestive organs, to labor long and actively without food and water. In this particular the moderate use of coca leaves as an article of diet is to the natives of its home not unlike the tea plant to the natives of China. As a remedy it has been recommended as a nervine and stimulant in a number of diseases, more especially for an enfeebled mental condition resulting from brain neuroses and as an antihypnotic for physicians, nurses and such persons whose vocation necessitates a sacrifice of sleep. Its success as a therapeutic agent has not in all instances been vindicated, but some of our

* Published also in *The Argus*, November 2, 1884.

enterprising manufacturing chemists, believing in the virtues of new remedies, have resurrected it from the catalogue of obsolete drugs, and, by the introduction of palatable elixirs, endeavored to place it on the list of wants as a valuable remedy for the cure of such diseases as claimed for it by experienced physicians. The active principle of this plant, and for which the anæsthetic properties in ophthalmic surgery are claimed, was first extracted from the leaves by Gadeke, in 1855, and at that time its peculiar effect in destroying the sense of taste and sensation when applied to the tongue was discovered. Caffeine and theine, the alkaloids of the coffee and tea plant, promising better results for the same ailments, have almost entirely replaced cocaine, and were it not for the fact of its anæsthetic properties recently discovered, its virtues as a therapeutical agent would probably have remained questionable with many. That the anæsthetic influence of this apparently harmless alkaloid will prove of great value in ophthalmic surgery has been sufficiently demonstrated by the experience of several prominent specialists, who have hastened to make known the results of their experience by its application in capital and minor operations on the eyeball. The positiveness with which our daily newspapers have heralded the marvelous anæsthetic results of this alkaloid, and the safety with which a patient may enter upon operative treatment in diseases and injuries of the eye when placed under its influence, must not be accepted as infallible for all that has been claimed for this new discovery. Enough has been demonstrated to establish the fact that for operative treatment on the cornea and mucous membrane lining the eyelids and covering the anterior surface of the eyeball its anæsthetic effects are prompt and of sufficient duration to be grateful to the patient and void of the dangers that may result from the use of chloroform or ether. A limited experience satisfies me that for operative treatment necessitating incisions into the deeper tissues of the eyeball and eyelids, its anæsthetic virtues cannot be safely relied upon. One to five drops of a two-per-cent. solution of cocaine, when applied by instillation for pain resulting from neuralgia of the eyeball, readily produces a diminution of sensibility, and its palliative properties will prove to be of value to the physician and comfort to the patient. No unpleasant reaction or symptoms of irritation have in my experience resulted from its use. I have very recently tried its effects in a case of acute inflammation of

the drum membrane of the ear to alleviate pain, with most happy results. Its action is apparently alike in children and adults. Caffeine and theine, extracted from the leaves and bean of the coffee and leaves of the tea plant, being analogous in their therapeutical action, but belonging to different family groups, tempted me to experiment with a two- and four-per-cent. solution of the above named alkaloids for the purpose of determining the existence of any anœsthetic properties identical with cocaine. The solutions were freely applied to the eyes of Dr. Munson and to my own, but no perceptible reduction of sensibility was produced; hence it is safe to infer that the anæsthetic properties of these medicinal plants, as far as is known, is confined to the coca shrub. To how great an extent in the practice of general surgery the new discovery can be relied upon is yet to be determined. There will be no near end to the many experiments to be made in ascertaining the complete value of cocaine as an anæsthetic agent. Its newly discovered virtues will create a demand for its use, and, its manufacture being costly, it will become necessary to exercise caution in the selection of a chemically honest preparation.

USE OF HYDROCHLORATE OF COCAINE, WITH CASES.

BY G. S. MUNSON, M.D., A. M. C., '80, ALBANY.

[FOR THE MEDICAL ANNALS.]

I was fortunate enough to be in New York city at the time the new local anæsthetic, hydrochlorate of cocaine, was first introduced in this country. Its wonderful effects immediately excited my admiration, and since my return to the city of Albany I have had several cases in which this novel and important remedy was used with striking results.

CASE I.—October 20. Mr. W. J. S., age 24, from Schoharie county, while at work with a threshing machine several days before, receive a splinter which imbedded itself in the cornea of the left eye. The eye was considerably inflamed from the presence of the foreign body, as well as by the fruitless attempts of several local physicians to remove it. Patient nervous and at first unwilling to have any instrument approach his eye. In the

presence of Dr. Bendell one drop of a four-per-cent. solution of cocaine was put into the eye, and in five minutes it was so completely anæsthetized that I was able to remove the foreign body without the least painful sensation or involuntary motion of the eyeball on the part of the patient.

Case II.—October 21. This day instilled a drop of cocaine, four-per-cent. solution, in the eye of a young man of seventeen, who had a piece of steel imbedded quite deeply in the centre of the cornea. The anæsthesia was as complete as in the first case, and the foreign body was as readily removed without pain.

Case III.—Mrs. R. I., age 22, presented herself at the office with a chalazion of the upper lid. At intervals of ten minutes for half an hour the same solution of cocaine was instilled in the eye. Before operating I noticed that the anæsthesia of the lids was complete, as tested by touching them with a probe. The application of Knapp's lid forceps as they compressed the entire tissue of the lid caused some pain, but not as much as without the drug. The tumor was removed from the inner surface of the lid, and at the first cut of the knife through the conjunctiva the patient felt no pain, but as the incisions were deepened I could not discover but that the pain was as great as we usually find when not using this drug. It was quite evident to me that the effects of cocaine acted in this case only superficially, at least so far as the lids were concerned.

Case IV.—R. M., age 9. Some three months since the right eye had been operated upon, under ether, for convergent strabismus. October 28 I instilled the same solution of cocaine in the left eye. At the end of five minutes the anæsthesia was so complete as to allow of my grasping the conjunctiva with the forceps without there being any sensation. Five minutes later another drop was instilled. Twenty minutes after the first instillation I was able to grasp the conjunctiva, cut it with the curved scissors, insert the strabismus hook, cut the muscle and close the wound with a limiting suture, absolutely without the patient's suffering the least pain. All the patient felt was the dragging forward of the muscle on the strabismus hook when that was inserted, and this was not complained of as pain, but as a daagging sensation.

My observation and experiments in these four cases were noted under the instillation of a four-per-cent. solution. This strength is double that generally used and advised, so that its effects were

doubly certain. The action of the drug was apparent in two or three minutes, in fifteen minutes I would operate, and its effects, so far as diminution in sensibility was concerned, had mostly disappeared within the hour. The pupil was more or less dilated in every case, although no discomfort in vision was noticed. In fact, to say that the cocaine is as harmless and produces no more discomfort than a drop of water seems the truth, and unquestionably it has gained for itself already a high place in the armamentarium of the physician and surgeon.

ABSTRACTA.

DR. SQUIBB offers fluid extract of Camellia (green tea) as a substitute for cocaine. The dose is twenty to thirty minims.

PROF. WOLCOTT GIBBS appears to have fared hard at the hands of the reporters at Montreal. He did not say, as reported, that there were certain molecules composed of as many as 20,000 atoms, but that certain molecules had an atomic weight as great as that. The greatest number of atoms in any molecule that he knows of is 600 to 700.

ALCOHOLIC STIMULANTS.—A man may take two or three glasses of stimulants through the day as he may feel the inclination, and he may continue this habit for twenty years without any evident harm accruing from it; but when this man reaches that period of life when the vital powers are on the decline, he suddenly finds himself "old before his time," for he has all these years been laying the foundation of a chronic endoarteritis. I believe, gentlemen, that fifty per cent. of all diseases arise from the use of alcoholic stimulants.—*Dr. A. L. Loomis, in Weekly Medical Review.*

CANNED GOODS.—*To the Editor:* Occasional instances of alleged poisoning from the use of canned goods have been reported, with the effect of needlessly frightening many consumers of canned goods. Investigation of some of these alleged poisoning cases has shown that they were either wholly unfounded or greatly exaggerated, and the object of this communication is to ask if you will not in the future kindly investigate cases of alleged poisoning and see whether the trouble may not be attributed with equal justice to other causes. Canned goods

being hermetically sealed while fresh at the sources of supply, we believe are in most cases fresher, more wholesome and palatable than many so-called fresh articles which are exposed for considerable period of time in city markets, and that there are fewer cases of bad effects from the consumption of canned goods than from the consumption of a similar amount of food not canned. The average annual production is now estimated to be upwards of five hundred millions of tins, or about ten for every man, woman and child in the United States.—*Canned Goods Committee New York Mercantile Exchange.*

When excavations were first begun in Pompeii, a party of Cincinnatians found there, in a pantry, many jars of preserved figs; the fruit was found good. Investigation showed that the figs had been put into the jars in a heated state, an aperture left for vapor to escape, and then sealed with wax. The next year fruit-canning was introduced into the United States.—*N. Y. Medical Times.*

Picrotoxin for nightsweats of phthisis, one-fortieth of a grain at bedtime, is the most reliable remedy, as shown by Dr. Caldwell's experiments with many remedies, given in the *New York Medical Journal.*

Water is purified by the process recommended by Profs. Almen and Hausemann: To each quart of suspected water add about fifty minims of a three-per-cent. solution of muriate of iron, and afterwards lime water in inverse proportion to the hardness of the water—say one and a half ounces for a quart of ordinarily hard water. Now filter, and the filtrate will be almost pure, as seventy to eighty per cent. of organic matter will be thus removed.—*Rundschau Leitmeritz—National Druggist.*

The Cholera Germ.—The French Commission in Egypt, and Koch in Calcutta and Southern France have led to nothing definite, except to prove that men may spend their time in cutting up cholera cadavers with impunity. The patriotic French Commission were almost certain to be jealous of a man who, besides being a German, had the coolness to inform them not only that their Egyptian cholera germs are not peculiar to choleraics (*Blut plattchen*), but that their vaunted discovery is no discovery at all, an English observer having found them twelve years ago in the blood of people dead of cholera.—*Canada Medical Record.*

POROUS PORCELAIN is recommended for filtering liquids, as the microbe is incapable of passing through it.

C. W. PRINDLE, M.D., of Grand Rapids, Mich., says: "Have used Tongaline extensively in all forms of neuralgia and rheumatism, finding it a safe, easy and efficient remedy. For all the cases of neuralgic or rheumatic pains accompanying the colds that predominate in this damp and malarial region it seems to be a specific."

CORT F. ASKREN, of Corydon, Indiana, says: "I am using Mellier's Standard Buggy Case, and consider it the neatest, most durable and most convenient that I have ever seen."

SULPHUR dissolves in alcohol sufficiently to give the peculiar odor of the drug, to show the sulphur lines by the spectrum, and to cure cases where the drug is indicated.—*Southern Clinic.*

FEAR AS A CAUSE OF DEATH.—The relation of so-called mental and moral processes to death and life are mostly unknown. Illustrations constantly occur in which no solution can be given of the real cause of death in harmony with demonstrated physiological or pathological facts. In the *Medical Press and Circular*, August 13, the following cases are given and vouched for by reliable authority:

Two young girls were at dinner at their home in Marseilles, when they were told that a special friend of theirs had died the previous night of cholera. At once they became very nervous and left the table precipitately, ordered a cab and told the driver to take them as fast as possible to the town of Aix, some distance from Marseilles. When the cab got outside the city the coachman looked through the window to ask the address of the place to which he was to go. He saw one of the girls in convulsions and the other utterly unconconscious- In his turn the driver got frightened, abandoned the cab and ran about like a madman. When the police, who were sent for, arrived and opened the cab they found one girl dead and the other dying. A little way up the road they found the coachman lying on his face, dead.—*Detroit Lancet.*

MEDICAL SOCIETY OF NORTHERN NEW YORK.—At the thirty-third annual meeting, Albany, October 2, Dr. C. J. Farley, of Fort Edward, was elected president; Dr. G. W. Stratton, of Lee, vice-president; Dr. G. E. Gorham, of Albany, secretary.

THE MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

F. C. CURTIS, M.D., A. VAN DER VEER, M.D., LORENZO HALE, M.D.,
JNO. BEN. STONEHOUSE, M.D., WILLIS G. TUCKER, M.D.

VOL. V. NOVEMBER, 1884. No. 11.

GOOD WATER FOR ALBANY.

The river Rhine, it is well known,
Doth wash your city of Cologne;
But tell me, nymphs! what power divine
Shall henceforth wash the river Rhine?

—*"Cologne;" by Coleridge.*

Dr. Alfred Ludlow Carroll's paper on "Sewage Disposal," etc., awakened a lively interest in the matter of Albany's water supply, which continued through two meetings of the Albany Institute.

Dr. S. B. Ward said that State Engineer Sweet had visited the place in the river where the water is taken for city use, and found that the tides sweep the city sewage up and down past that locality. To avoid this impurity, Dr. Ward advised that the city supply should be pumped from a point about four thousand feet above where Patroon's creek empties into the river.

The water, although improved by this plan, would still contain some sewage from Troy, West Troy, the Cohoes mills, Lansingburgh, etc. But it is difficult to prove that the river water, contaminated as it is, has been in Albany a deleterious beverage; and the strong point in favor of the water of the Hudson is its unlimited quantity.

Col. Walter S. Church persistently asserts the superiority of the water of Sandlake township, Rensselaer county. There, is an elevated area of about twenty-five square miles, and the available water-shed of the Tierkenkill is thirteen square additional, not befouled by swamp vegetation nor by mills (although it feeds mills at a lower level), nor to any material extent by the

contamination of cultivated soil, such as potato-bug poison, etc. The soil is gravelly and sandy, a portion rather barren, and used largely as mere pasturage. The annnal rainfall is estimated at about 13,000,000,000 gallons, at least one-third of which, Dr. Carroll says, can be retained for city delivery. In this region five large lakes of from about 200 to 350 acres each — Martin's lake, Crooked lake, Glass lake, Sand lake and Aries lake—and several large ponds, provide natural storage for water. An artificial channel, of three-quarters of a mile to unite the Wynantskill with Aries lake, and one of half a mile from Aries lake to the Tierkenkill, would allow all this volume of purest spring water to flow from this chain of lakes through the Tierkenkill, in its natural channel, to the hilltop opposite Albany, and thence from a reservoir through an aqueduct, by its own gravity, into the city pipes, with sufficient pressure to rise higher than was the top of the old Capitol.

Other proposed sources of water supply are the sand plains west of Albany, and Thompson's lake, in the Helderbergs. As to the first of these, City Surveyor Bingham has shown that the sand-plain product is already utilized by means of Patroon's creek and Tivoli reservoir. The Thompson's lake project is objected to because of (1) the small yield of water. This lake, with an area of but seventy-eight and one-half acres, is at an apex which drains but a very small territory. Any single lake of the five Rensselaer county lakes named is of several times the area of Thompson's lake. (2) Thompson's lake is fifteen miles from Albany, three miles miles more than the most distant lake of the Rensselaer county chain, and would require a conduit the entire distance, while the Rensselaer waters would flow by their natural channels, except as stated.

Mr. Horace Andrews, C.E., engineer for the State Board of Health, says of the project of taking water from a point further up the river, that a difficulty presents in the interposing islands, which prevent convenient access to the open current, and there is, besides, the objectionable nearer approach to Troy's sewers.

If the Albany basin should be condemned and sewage excluded from it, and if an intercepting sewer should be constructed to prevent access of Albany sewage to the river within the city limits, then the improved water taken from the present point of pumping would be about equivalent to water taken now from a locality further north.

But the river water at best is impure; bright tin floats submerged in the Hudson become invisible at a depth of less than six feet. The water of the Rensselaer lakes is far purer.

The claims made for the Sandlake water-shed warrant a thorough investigation of the territory by the best experts before Albany invests the large sum of $400,000 for the proposed new pumping service, as no such examination has ever yet been made.

L. H.

BOOK NOTICES.

A Compend of Organic and Medical Chemistry, including Urinary Analysis and the Examination of Water and Food. By Henry Leffman, M.D., D.D.S. Philadelphia: P. Blakiston, Son & Co. 1884. 12mo, pp. 144.

This attractive and compact little volume constitutes the tenth number of the series of "Quiz Compends," designed for the use of students of medicine in the quiz classes and examination rooms. It completes the subject of chemistry, Dr. Ward having treated inorganic chemistry in the seventh volume of the series, and while so large a field can scarcely be more than roughly sketched in so small a work, we cheerfully admit that the author of this little compend has, by the adoption of a rational and systematic classification and a style highly condensed, together with the frequent use of tables and the accession of graphic formulæ, succeeded in compressing the greater part of those portions of this difficult and extensive branch of chemistry, a knowledge of which is essential to the student of medicine, into the limited number of pages which his book contains. Such works as this are apt to encourage the practice of "cramming," but since there is so much in organic chemistry which a medical student can never hope to learn, and, indeed, has no need to learn, and since most of the treatises are so bulky and forbidding as to repel the advances which the student may conscientiously endeavor to make upon them, we are decidedly of the opinion that such expurgated and condensed treatises as this do really fill a want, and may prove of great value to many a student who would make little progress in a study of the larger text-books and manuals.

The latter part of the book is particularly good. The chapter on urinary analysis gives the most important tests very clearly

and concisely stated, and mentions the later tests for albumen and sugar. For the quantitative estimation of urea, Dr. Squibb's modification of the hypochlorite method, which is easily performed with simple apparatus, is given. The chapter on sanitary chemistry devotes three pages to the examination of drinking water, and is essentially practical and satisfactory. Then, all in all, and having in mind the difficulty of dealing with so vast a subject in so small a space, this is a book which we are glad to recommend, and from which we believe the student can obtain some clear conceptions of chemical theory and some very practical and useful lessons as well. W. G. TUCKER.

QUESTIONS SUBMITTED TO THE GRADUATING CLASS OF THE MEDICAL COLLEGE OF OHIO FROM 1871–72 TO THE PRESENT TIME [1883–84]. Cincinnati: W. H. Scott. 8vo, paper, pp. 50.

The pamphlet before us is one of considerable interest both to medical students and the instructors in our colleges. It gives the final examination questions, ten in each of the ten or eleven departments, submitted to the graduating classes of the Medical College of Ohio for the past twelve years, and shows that the work in most of the departments has been thorough and in all of them creditable to the institution. The selection of examination questions which will be fair to the student, and yet comprehensive enough to test his acquirements without demanding encyclopædic treatment on his part, is not an easy task, and many of these papers are models of what good examination papers ought to be. We note very few "catch questions," and most of them are very definitely expressed and yet cursorily worded. It is, perhaps, a question whether, as here, the same number of questions should be propounded in all the departments. In our opinion this is neither practical nor expedient, and we think that those branches like ophthalmology and gynecology, on which a less number of lectures are delivered than on the main branches, should have their questions, fewer in number, appended to those of the main department under which they would naturally be classified. In the medical curriculum there are really seven departments, and it is rather hard to demand a lengthy examination in ten or twelve, with equal weight seemingly attached to each.

These papers afford an illustration of one important fact. They show traits of individual methods of instruction, as all

such papers of necessity must, and all furnish evidence of the fact that it is uncivil and unjust to take away the examining power from teachers and vest it in independent hands.

W. G. TUCKER.

ZIEMSSEN'S MOTOR POINTS OF THE HUMAN BODY. A Guide to Localized Electrization. By Herbert Tibbitts, M.D. New York: J. H. Vail & Co. 1884. Seven quarto pages of plates. Price, $1.25.

It is a pleasure to announce the publication of so useful and ornamental a work as the one before us. No one who has used electricity much can doubt the utility of these excellent plates, which are copied from photographs by Prof. Ziemssen. An interesting account of the methods adopted in determining these points is given in the brief introductory by Dr. Tibbitt's. It is to be regretted that the editor has not given us brief directions to accompany the plates. Their utility would certainly be increased thereby. JNO. BEN. STONEHOUSE.

MUMPS AS A CAUSE OF SUDDEN DEAFNESS, and NOTES IN TREATMENT OF TRACHOMA BY JEQRIRITY, are the subjects of two monographs which we have received, both by Dr. Leartus Connor, of Detroit.

The former treats of an affection of comparatively recent cognizance and interest to those engaged with aural diseases. One original case is reported, in which during the course of an attack of mumps, disease of the labyrinth came on suddenly, the disease having probably extended from the parotid gland through the middle ear. An abstract of thirty-one other cases is collected. The mischief wrought seems to be due he says, to a large serous exudate, the same process probably occurring in the labyrinth as in the gland, producing here immediate loss of hearing. As to treatment, nothing has thus far been devised that has produced satisfactory results.

In regard to jequirity, concerning which he contributes personal observation and collated facts, he concludes (1) that its activity is due not to bacilli, but to an active principle; (2) that a three-per-cent. solution is most available, freshly made, the value of preservatives not being established; (3) it should be applied but once in twenty-four hours, and not repeated if the jequirity ophthalmia is produced, a new attack not being induced under three weeks; (4) proper cases are chronic trachoma with

pannus or parenchymatous keratitis or old corneal opacity, being contraindicated if there is purulency and in acute cases.

The former article is reprinted from the *American Journal of Medical Sciences*, the latter from the *Detroit Lancet*.

F. C. CURTIS.

AUSCULTATION, PERCUSSION AND URINALYSIS; An Epitome of the Physical Signs of Diseases of the Heart, Lungs, Liver and Kidneys. By C. Henri Leonard, M.D., Professor of Gynecology, Michigan College of Medicine. Fully illustrated, cloth, 16mo, 166 pp., postpaid, $1.00. Detroit, Mich.: The Illustrated Medical Journal Co., publishers.

The Medico-Legal Journal. It is a pleasure to call the attention of our readers to this periodical, which is published under the auspices of the Medico-Legal Society of New York, and which contains the papers read before the society. The editorials, abstracts, transactions and reviews are, without exception, interesting. Excellent portraits of such men as Prof. Samuel D. Gross, M.D., and Hon. David Dudley Field, and others, are also included with this journal. There are very few physicians who are not interested in one or more of the many departments of medical jurisprudence, and a journal devoted to this subject deserves hearty support from the profession, especially when it is so meritorious in every way as this. J. B. S.

Physician's Visiting List, 1885 (Lindsay & Blakiston's). Thirty-fourth year of its publication. Containing list of poisons and antidotes, dose tables rewritten in accordance with the Sixth Revision of the United States Pharmacopœia, methods for producing artificial respiration, with illustrations, etc., etc. Price, for twenty-five patients weekly, $1. P. Blakiston, Son & Co., 1012 Walnut street, Philadelphia.

Annals of Surgery. A monthly journal published simultaneously in the United States and Great Britain. Edited by L. S. Pilcher, M.D., of Brooklyn, N. Y., and C. B. Keetley, F.R.C.S., of London, Eng., with collaborators in the United States and Great Britain. $5 a year in advance. The first number is to be issued in December, dated January, 1885. St. Louis: J. H. Chambers & Co., 405 N. Third street. London: Smith, Elder & Co., 15 Waterloo Place.

Report on Malaria at Yorktown, Westchester County, with topographical map, made by Dr. F. C. Curtis, for the State Board of Health of New York.

The Poultry Monthly has many physicians among its subscribers and contributors. The illustrations are beautiful. Both older people and little folks are interested in the material presented, and are stimulated to the innocent diversion or to the healthful employment of keeping choice breeds of poultry. Terms, $1.25 a year, in advance. Address, Ferris Publishing Co., 481 Broadway, Albany, N. Y. We will send both THE MEDICAL ANNALS and *The Poultry Monthly* for one year to one address at clubbing rates, for $1.75.

PERSONALS.

Dr. William H. Bailey returned about the middle of October from a rapid tour of six weeks through some parts of Europe. He left the last of August by the "City of Berlin," landing at Liverpool, whence he went directly to London, spending a week there. His time was taken up in seeing the more impressive sights of this immense city, it being his first visit. The preservations of the antique and historical, the well-ordered arrangements of this busy hive of industry, the vastness of the place and the multitudes of what one should have months to visit most impressed him. He went from there to the continent, and after spending a little time with his nephew, Hon. John M. Bailey, United States Consul at Hamburg, he went to see the picture galleries and other sights of the two notable cities of Berlin and Dresden. Thence finding his way westward again, he reached the Rhine by way of Frankfort and Weisbaden, and passed a memorable day in a trip down that river to Cologne. While agreeing with the general verdict that there are no points of comparison between the valleys of the Rhine and Hudson, he patriotically asserts that for impressive beauty and natural loveliness the Hudson is far superior. Reaching Paris by the way of Brussels, he made a stay of some days in that city, and then took the "Wieland," of the North German Lloyd line, home from Havre, with his wife, who accompanied him, and the family of his nephew. Rapid traveling, to cover so much ground in the short time, involved something of labor, but the novelty and diversion were a very welcome interlude in the routine work of home, and the trip will probably always remain as a pleasant memory.

The medical profession of this vicinity desiring an opportunity to show their regard for Dr. Bailey, seized the one offered by his recent return from his trip abroad, and invited him to a reception at the Delavan House on the 29th ult. The legal profession united with them to do a like honor to Hon. John M. Bailey after several years absence in Europe. A large number were present, and the occasion was in every way enjoyable. Dr. Van der Veer presided. A number of felicitous after-dinner speeches were made by Drs. Hailes, Snow, Bendell and Featherstonhaugh, president of the Medical Society, and on the part of the lawyers by Messrs. Buchanan, King, Cohn, Nussbaum and Herrick. Dr. Bailey and Mr. Bailey were also both happy in their responses to their welcome home. Dr. Bailey may feel every assurance of the high esteem in which he is held by his professional brethren, not only for his stand as a physician and member of the community, but for his personal qualities as well, which have won a universal regard. F. C. C.

Dr. N. Emmons Paine, A. M. C., '75, has opened an office with his father, Horace M. Paine, M.D., and his brother, Howard S. Paine, M.D., at 105 State street, Albany.

He practices only the specialty of insanity and nervous diseases. His experience in this branch of medicine was acquired during his residence as assistant physician in the New York State Asylum for the Insane, at Middletown, Orange county, N. Y. He served from May, 1877, to October, 1880, at which time he resigned. In the Tenth Annual Report of the Middletown Asylum, Superintendent Dr. S. H. Talcott says: "It is my painful duty to report that during the past summer the second assistant physician, Dr. N. Emmons Paine, failed in health to such an extent that he was obliged to relinquish his duties here.

"In parting with Dr. Paine, it affords me pleasure to state that during his three and one-half years' service at this asylum he greatly endeared himself to the hearts of his patients, to the superintendent and other officers of the asylum, and to all with whom he came in contact. His resignation is a source of deep regret, for he gave promise of great usefulness in his chosen specialty." . . .

Dr. L. T. Morrill, '73, who has been practicing in Georgetown, Colo., sailed for Europe November 3, 1884, from California, partly for the benefit of his health and for the purpose of improving himself in surgery. Will return in July, 1885.

Dr. J. M. Stone, '83, Eastmanville, Ottawa Co., Mich.

THE

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PRESIDENT'S ADDRESS BEFORE THE MEDICAL SOCIETY OF THE COUNTY OF ALBANY.*

BY HERMAN BENDELL, M.D., A. M. C., '62, ALBANY.

In conformity with a custom, I have occasion to congratulate you that we are permitted to assemble in annual session to add the result of our labors to the honored record of our society. The condition of our society during the past year has been such as to justify me in letting well enough alone, by offering no suggestions that could add to the usefulness of our organization. Our monthly meetings have been fairly well attended, the papers presented have been of such character as to merit the highest appreciation and awaken the members of our profession to the importance of continuing an interchange of knowledge and experience, by a participation in our deliberations and by contributing to the professional, literary and social status of the society. I hesitate at this time to occupy your attention with a recapitulation of the details connected with the birth, history and progress of the Albany County Medical Society. Its honored record during the past seventy-eight years best serves to convince us that it has faithfully and in a progressive spirit fulfilled the aims and objects for which it was called into existence. It is rich in associations of the past. As one of the oldest county medical societies in this state, it has always maintained its well-earned reputation as being active and efficient, by the

*Delivered at the annual meeting, Tuesday, October 14, 1884.

individual efforts of its members to elevate the standard of our profession and labor for a full and harmonious development of fraternal intercourse.

The character of the work which constitutes the effectiveness of our society is based upon the knowledge and experience of such members as take a special pride to contribute, for the information of the profession, the results of their labors in the broad field of the science of medicine. It is a fact to be regretted that there are but few among us who show a disposition and readiness to be active in promoting the standard of our profession by a participation in our deliberations, or by encouraging and assisting those chosen to govern the affairs of the society. We number among our members many who are recognized by the profession as earnest workers and whose active presence at our meetings would promote the usefulness of our society, but my experience as your presiding officer has not differed from that of my predecessors, in that it is hard work to awaken a spirit of professional activity in matters pertaining to society affairs among certain members, whose help would be of material assistance in encouraging the good work in which we are engaged.

In order to obtain the benefits to be gained from professional intercourse, our gatherings must be so conducted as to be interesting, instructive and social to our members. The value of listening to the reading and discussion of essays on medical subjects is greatly increased by the introduction of topics from which the young practitioner can gain information that will be of service to him in the practice of his profession. Frequent reports from our standing committees, especially on the subject of hygiene and its relations to the public, and on pathology, would be an inducement to increase the attendance at our meetings and encourage instructive interchange of views. There should be no impediment so formidable but that it can be overcome in perfecting the work of our society and elevating it to a high standard as a monitor for the dissemination of practical details in the science of medicine. The marked progress that is being continually made in the specialties of medicine and surgery should be an inducement to those practicing our profession, not only as an art, but also as a science, to make our intervening meetings popular, by the intelligent discussion of such questions as are of professional importance in the practice of medicine. The routine method of our monthly meetings

not speaking underratingly of the advantages to be gained by the reading of well-written and studied subjects, should be varied by the introduction of generalities of daily occurrence in the experience of the busy practitioner. Our gatherings should be considered as a family circle, where facts, incidents and all questions having any relation or bearing on the subject of general medicine should be presented for information and discussion. The secret of popular and well attended sessions is not due to the presentation of learned addresses compiled from carefully searched literature. We should endeavor to direct the attention of our members to the fact that our monthly meetings are also intended for the purpose of cultivating and strengthening professional and social intercourse and to gather from each other such information and knowledge as will be productive of the most good. The history of our society from the date of its organization to the present time clearly shows that its deliberations have always been conducted with reason and judgment and that the energies of its members have been advanced for the accomplishment of results best calculated to encourage such work as is most essential for sound observation and practical information, and it remains for us to so conduct the future affairs of our society that we need have no fear for the perpetuation of its usefulness.

Since our last annual session three of our members, Drs. John B. Rossman, John W. Mann and Charles P. Staats have been summoned to their final rest. Suitable action having been taken by the society in announcing the death of our respected colleagues, it is unnecessary at this time to further eulogize their worth and merit.

And now, gentlemen, permit me to engage your attention in listening to the paper of the evening, on

NEARSIGHTEDNESS IN OUR PUBLIC SCHOOLS; ITS CAUSES AND PREVENTION.

The frequency of nearsightedness among children attending our public schools and academies imperatively demands that the attention of those having charge of our educational affairs should be directed to the importance of guarding, by a strict enforcement of precautionary measures, against the causes tending to a development of this refractive trouble. In searching for the causes of myopia among the attendance at our public

schools, architectural defects in the erection and sanitary appointments of school buildings, together with insufficient light, faulty construction and arrangement of seats and desks, overcrowding and fine print, have been accepted as active causes in predisposing to a development of this disease.

Admitting that architectural defects and sanitary imperfections enter largely into making up the causes that tend to the development of nearsightedness, I believe to be justified in claiming that the advocates of this theory place too much importance on the absence of scientific sanitation. It is my experience that the number of children attending at such school-houses, constructed with especial care regarding sanitary precautions, where the most approved theories advanced by sanitarians, as to safe ventilation, drainage and avoidance of overcrowding, have been carefully complied with—in fact, such school-houses as are pronounced by those competent to judge to be model ones so far as architectural and sanitary appointments are concerned—who are incapacitated by nearsightedness is equally as large as among the classes attending at such buildings that painfully remind the visitor of the necessity of reconstruction in respect to their architectural and sanitary arrangements.

To question the soundness of the many theories advanced, or to doubt the pernicious influences arising from defective drainage, ventilation and a faulty system in the construction of the modern appliances in hospitals, barracks, school, tenement and apartment houses, would call forth an avalanche of challenges from the many who have earnestly labored to convince the intelligent and reading people that the primary cause of nearly all diseases lies in a lack of sanitary provisions. I have no desire to be placed on record as being antagonistic to the theory that the primary causes and development of zymotic diseases are largely due to gaseous products generated from the decomposition of sewage, and miasmatic influences, but believe to be justified in claiming that the theory so loudly heralded and so generally accepted, that the frequency of nearsightedness among the attendance at our public schools can be traced to architectural imperfection and sanitary neglect, is an erroneous one. There can be no question of greater importance agitated than the question of counteracting all influences that tend to the propagation of disease and retard a healthy and vigorous development of mind and body; and, in order to bring about this

condition of things, it is of vital importance that all school buildings should be planned and constructed with more than special attention to perfect architectural and sanitary appointments. On the other hand, the attention of those entrusted with the management of our educational affairs must be directed to the fact that the tendency to the development of nearsightedness among school children can be more clearly traced to the ill effects of too much school work and too little out-door recreation than to causes that can be controlled by architectural or sanitary precautions.

Prolonged occupation, especially for near purposes, imposes a trying taxation upon the organs of vision, and the influences of such occupation oftentimes becomes the more harassing by unnatural and imprudent position. I have frequently observed that the head and body of school children is inclined to an angle enabling them to properly focus the print of a book or manuscript lying upon the desk before them, and in such position scanning the printed lines, causing a continual oscillation, in a posture detrimental to the eyes, from the focal point of vision, thus necessitating increased action of the ciliary muscle, tending to a development of myopia in the normal eye and predisposing to a progressive condition in eyes already myopic.

Believing that the development of nearsightedness among school children is due to overtaxation — that is, to excessive application made necessary to become proficient in the curriculum overcrowded with studies and exercises that can easily be dispensed with, and this burden imposed upon children in such years of life as are especially favorable for the development of nearsightedness, and at a period when bodily growth is most active and demands a liberal allowance of open-air exercise and brain rest—the remedy to check this growing evil must be in lessening the harassing work of school life. Urging upon studious and energetic children the importance of excelling in their school work, encouraging them in their ambition to see their name high up on the roll of merit, to win honors or capture a medal, is unhappily becoming a feature in the qualification of school teaching, more instrumental in developing nearsightedness than the ill effects of insufficient hygienic or sanitary precautions. That the health of children is frequently undermined during the years of school life needs no more forcible conviction than that stamped upon the pale faces, worried countenances and

puny frames of the many children leaving the portals of school after the daily session, burdened with the responsibility that unless they are proficient in the lessons assigned for the following day accusations of indifference to their school duties, the ill-will of their teachers and the penalty of demerits must of necessity be a consequence. The ambitious pupil, ignorant of the laws of health and the consequences of exhaustive brain work, becomes a victim of disease, struggling with enfeebled physical and mental powers to continue at school work; every effort is burdensome, and eventually prostration is absolute and perfect rest is essential to permanent recovery. The eye, participating in the general enfeebled condition of the body, experiences the primal symptoms of myopia; rest and proper treatment restore the prostrated and neurotic patient, but the nearsightedness remains as a trophy of the struggle to keep up with the unreasonable demands of school requirements.

In eyes predisposed by heredity, the development of myopia is hastened by school work, coupled with defective light, fine print and unnatural position of head and body; but this occupation to the normally developed eye, especially when freed from the harassing requirements of an overcrowded curriculum, when school work and out-door recreation are equally apportioned, would rarely cause any visual disturbance. In healthy children the eye not predisposed by heredity to nearsightedness is capable of enduring, for far and near purposes, the varied amount of work to which it is continually subjected. Endowed by nature with a delicate and perfect organization and extensive working powers, it readily adapts itself for the performance of its noble duties, but its powers of endurance become weakened by excessive application and its delicate tissues susceptible to structural changes.

When we speak of a nearsighted eye, we mean a form-change of the entire eyeball, a change implicating the ocular tunics, especially noticeable by an elongation of the antero-posterior axis, and, owing to a weaker resisting power, more pronounced in the posterior portion of the globe. No pain or alarming symptoms usually accompany these gradual changes; oftentimes they are slight and give rise to little or no inconvenience, but in many instances they are of a progressive nature, and, together with loss of distant vision, are apt to develop intraocular disease, alarming in its character and fatal to vision.

Admitting the fact that myopia is frequently of hereditary origin, it must also be admitted, from observations recorded, that myopia is largely developed among school children in whom no taint of heredity can be traced. The fact is also apparent that in countries in which the masses of the people have given little or no attention to education, and in those countries where a liberal allowance of out-door exercise is added to counteract the depressing influences of school requirements, nearsightedness is of far less frequency than among those peoples whose customs and laws have established a system of education well calculated to afford advantages for mental culture at an expense of bodily development.

In this state the law admits children to our public schools when they have attained the age of six years. From this time until they have passed through the primary, intermediate and grammar classes and graduated from the high school, provided they have not been advanced by favoritism, the demands of proficiency in school requirements are exacted, regardless of the conditions essential to a healthy physical development. The educator, conforming to instructions from his superiors, has no discretion in the matter; the high-school standard must be maintained and a still higher one encouraged; provisions tending to counteract the depressing influence of mental strain and activity are overlooked; the hours intervening from the close of one school session to the beginning of another are largely occupied in gaining proficiency in studies assigned to be mastered at home. Obedient to the demands of conformity to the curriculum and school discipline, the work goes on, until the enfeebled body and tired brain, unable longer to endure the strain, mutiny against a continuance of the battle. Under this condition of affairs are we not justified in placing the principal cause of nearsightedness among the attendance at our public schools to the depressing consequences of too much school work? Does it not follow that the same influences that tend to undermine mental and physical vigor, especially at a period of life when bodily development is most active, also tend to produce a weakened condition of the ocular tunics, predisposing to structural changes?

Statistics show that a large percentage of children enter upon school life with normally developed eyes; that rarely during the primary work of the lower classes symptoms of myopia are developed; furthermore, it is proven that in the higher and

finishing classes fully seventy per cent. of the school attendance are nearsighted. Statistics recently collected in Germany show that of 45,000 children in schools of all grades more than one-half were found to be nearsighted, and in some schools the proportion was fully eighty per cent., and at the gymnasium in one of the principal student cities there actually was not a single scholar with normal vision; the number of nearsighted children from natural or hereditary causes was but ten per cent. In this country carefully collected statistics do not record much better figures.

The increase of nearsightedness among children attending the grammar schools in this and other countries inclines to the belief that the mischief is largely due to the laborious school work exacted in the more advanced classes. It is claimed that myopia is rarely acquired or developed in children past the age of sixteen; if this theory is correct, the large percentage of nearsightedness among school children is developed between the ages of six and sixteen, or during the period of education when continuous application to school work is more apt to interfere with the natural changes the eye undergoes in connection with bodily growth and development. Experience convinces me that it is a rarety to find a dull and disinterested pupil troubled with myopia; the victims of this refractive anomaly are generally found among the most proficient and promising school children.

Of late years school buildings have been planned and erected with special attention to location, light, ventilation and sanitary provisions, furnished with the latest and most approved school furniture, careful attention given to the introduction of text-books printed in plain and readable type, and every reasonable precaution bestowed by teachers, assisted by the advice and suggestions from local and state boards of health, in providing for the bodily welfare of school children, but the ratio of nearsightedness has steadily increased. If, notwithstanding the faultless construction and perfect arrangement of our modern school buildings, myopia continues to increase, can we not safely place the principal cause of nearsightedness to an overtaxation of the visual power dependent upon too much school work? Heredity as a cause of myopia is universally admitted, but its tendency to a progressive condition is induced by occupation. When we compare the small percentage caused by heredity with the large percentage of acquired nearsightedness among school children,

and fail to trace its origin to architectural errors, sanitary neglect, deficient light and a faulty construction of seats and desks, it is evident that the mischief must be due to close application and prolonged tension for near work.

As education widens, the demands of school work become larger and the conditions predisposing to nearsightedness greater. The danger to the eye is in prolonged application, and this source of danger is doubly great when borne by a jaded body and tired brain. Too much school work demands increased use of the visual power for near purposes, and the influence of this prolonged convergence of the visual axis is an important factor for the development of myopia. The school requirements of to-day are well calculated to overburden the eye with long and harassing application for close work. The importance of intervals of rest and the injurious consequences of visual strain are entirely forgotten in the ambitious efforts to gain the tempting school honors. The eye, during the period of bodily growth, is susceptible to changes resulting from excessive application; hence the injurious influences of prolonged visual taxation is more apt to develop ocular disease in children during the period of school life than in persons subjected to the same work at a more mature age.

Taking into consideration the disability incapacitating myopic individuals for the performance of labor or any vocation where acuteness of vision is indispensable, and knowing that myopia, especially in the higher grades, predisposes to intraocular disease, oftentimes fatal to vision, the question of how to prevent the acquirement of nearsightedness and arrest the progress of the disease, when developed, is of vital importance. The frequency of myopia among school children demands that the causes tending to the development of this refractive trouble should be remedied and a strict observance of preventive measures, even if detrimental to education, be enforced. It is important that the attention of those having the management of educational affairs, and of teachers generally, should be directed to the necessity of a change in our methods of education — of lessening the burden of school requirements by pruning the overcrowded curriculum and counteracting the depressing influences of school work by a liberal allowance of out door exercise and recreation. The tendency to legislate the introduction of additional studies to the already replete course in our public

schools should be discouraged, and a system apportioning the amount of school work in all grades, from the primary to the academic departments, by the introduction of exercises calculated to promote bodily growth and mental activity, should be encouraged. The daily school session should be so arranged that a liberal amount of time be assigned for recess, the gymnasium and out-door sports. It must be admitted that continuous application for near purposes is apt to develop alterations in the delicate tissues of the eye; hence the importance of short study hours, with intervals of rest, is forcibly suggested. Teachers should be familiar with the causes that tend to a development of nearsightedness and competent to enforce the necessary precautions in guarding against the dangers of a progressive tendency in the management of children of myopic heredity; they should also be competent to detect — and it is not a difficult task to acquire the method of examining the eyes of children assigned to their care — all cases where the acuteness of vision is below the normal standard, and direct the attention of the parent or guardian to the importance of proper treatment before the child can safely enter upon school work.

Undoubtedly the large percentage of nearsightedness among children attending the public schools of this and other countries is due to prolonged application of the eye for near purposes; and, when we consider that myopia once acquired cannot be cured, but only corrected by the adjustment of suitable glasses, the old adage that "an ounce of prevention is worth a pound of cure," will apply in checking this evil consequence of too much school work, and, in order to make the remedy efficient, the present system of public school education must be so systematized as to release the eye from any undue amount of strain and provide a more liberal allowance of time for physical improvement. This can be accomplished by extending the course in the primary and grammar departments and by not crowding six years of study into four in our high schools. An extension of time will permit the introduction of short study hours with intervals of rest, and this change will be an important factor in preventing the dangers likely to occur from visual taxation for close work; it will also prevent the fatigue and pain so generally complained of by children when the eye is subjected to long-continued effort in accommodating for near purposes and in lessening the danger to the eye; will also prove beneficial by

affording physical and mental rest during the continuance of the daily school session. It is also important that school work should be so arranged as not to overburden the pupil with any task likely to produce an undue amount of pressure by the external ocular muscles upon the eyeball; hence the danger of long-continued convergence in reading, writing and sketching should be religiously avoided. Special efforts should be made to guard against the injurious influences of imprudent bodily posture. Seats and desks should be constructed to suit the sizes of children and so arranged that the supply and direction of light may meet the requirements necessary for the comfortable exercise of the visual organs. Prolonged tension of the eye with the body and head inclined forward interferes with the free return of blood from the head, causing increased intraocular pressure, and thus favoring a progressive condition in eyes of a myopic hereditary tendency.

The increase of nearsightedness in our public schools calls for the enforcement of energetic measures forbidding the use of the eyes during school work without frequent intervals of sufficient rest. Properly constructed school-houses, faultless construction and arrangement of seats and desks, perfect ventilation, good light and legible print are of little consequence in preventing the increase of myopia among the attendance at our public schools so long as the unreasonable demands of school requirements are continued.

CASE OF OVER-EXTENSION FOR FRACTURE OF THE FEMUR.

BY W. A. MERRITT, M.D., CHERRY VALLEY, N. Y.

[CONTRIBUTED TO THE MEDICAL ANNALS.]

In January, 1871, a young man living in the village of Cherry Valley had the misfortune to fracture the femur. He was of robust and good constitution. I was sent for, but was absent from home, and the case fell into other hands. At the end of eight weeks I was again sent for, and found on examination the following conditions: The fracture was put up in the ordinary way with one of Day's patent extension splints. Before this was removed I measured the fractured limb, and found it an inch and a half longer than the sound one, enveloped in a starch

bandage very properly applied. The bandage was then split open from top to bottom, and the extension splint removed. I found the leg from the knee to the hip was about half the size of the sound limb. From the knee to the ankle venous congestion had taken place, and was of long standing. There was complete anchylosis of the knee joint. The patient had become anxious about the probabilities of saving his leg, as amputation had been talked of.

The idea suggested itself to my mind that the first step in order would be to allow the limb sufficient time to contract to its natural length. To accomplish this result the limb was left enveloped in the same bandage, tied together with tapes at three points, until the next day, when I again visited the case with other physicians. We found, on measurement, that it had not contracted to its proper length, and it was left in the same situation as the day before. On visiting the case the next day we found the leg about half an inch shorter than the sound limb. At this time I made a careful examination of the fractured ends of bone, and found an oblique fracture. The exact situation was easy to get at, as the thumb and finger could be easily passed between the ununited ends of bone, on account of the extreme emaciation of the muscles; the limb could be easily placed in any position by taking hold of the foot and swinging it like a gate on its hinges, without causing much pain. I concluded to treat the case without making use of extension. It was then dressed with two short splints, one on each side of the fracture, inside the starch bandage, and the limb placed perfectly straight. In this position it was left for five weeks, with an occasional measurement, at the end of which time it was found perfectly united. In the course of another week the patient was placed in an upright position and directed to bear some weight on the fractured leg; this was repeated every day until the end of the eighth week.

As before stated, a complete anchylosis of the knee joint had taken place. On the first day of the ninth week after a proper adjustment of the fracture, the patient was able to visit my office, and with the assistance of Drs. Clyde and Sharp we broke up the adhesions. The operation was so thoroughly and completely performed that it was not necessary to repeat it. The young man has now as good and useful a leg as its fellow, except the shortening, which is about half an inch. This case simply shows that too much extension can be made use of.

ABSTRACTA.

A Case of Tubal Pregnancy.—Dr. Henry Hun, of Albany, records in *The American Journal of Medical Sciences* for July, 1884, a case of tubal pregnancy, in which the cyst burst at about the twenty-fifth day, and the patient died. Dr. Hun obtained the specimen, and after having rendered the embryo transparent by oil of cloves, carefully studied it and made an accurate drawing of it.

In this case the ovum was in the right Fallopian tube, and its corpus luteum was in the left ovary. In a considerable number of cases of tubal pregnancy, the corpus luteum is found in the ovary of the other side, and it is very possible that this unusual origin of the ovum may be the cause of the tubal pregnancy, for if the tube bends over and reaches the opposite ovary, it will be apt to be so bent and twisted that the ovum will meet with great difficulty in passing through, or if an impregnated ovum passes across the pelvis and enters the tube on the other side, so much time will be consumed in its journey that it may develop to such a size before it goes to the uterus that it cannot pass through the tube, and will continue its development in this organ. This is the only cause which can be assumed in Dr. Hun's case, for there was no occlusion of the tube by tumors, bands of adhesion, or displacement of the uterus, as are sometimes found in these cases; neither was there any great fright or emotion experienced at or near the time of sexual intercourse, which in a number of such cases has appeared to cause the extra-uterine pregnancy.—*St. Louis Med. and Surg. Jour.*, Sept.; *Med. and Surg. Rep.*, Oct. 18; *The Analectic*, Nov., 1884.

Emmenagogue—Titanium.—Dr. M. M. Griffith, DuBois, Pa., in the *Medical World:* French women cause barrenness by taking two or three pills, three times a day, of aloes and carbonate titanium, of each two grains, for a week or ten days before an expected menstrual period. A married woman using the pills does not become pregnant.

In *The American Medical Digest*, Dr. A. J. C. Skene makes the pertinent query, "How is it with an unmarried woman?" Dr. Skene's witticism deserves a place in Dr. Wise's volume of medical humor.

VEST POCKET LABORATORY FOR THE PHYSICIAN.—Parke, Davis & Co. present a pocket case which enables the physician to carry with him the means for making all the qualitative and quantitative tests ordinarily required in examinations of the urine for clinical purposes. It contains a series of urinary test papers, as perfected by Dr. George Oliver, of London, which include

1. Litmus paper (neutral shade).
2. Reagents of sugar.
   (a) Picric Acid.
   (b) Indigo Carmine.
3. Tests for Albumen.
   (a) Potassio mercuric iodide.
   (b) Sodium Tungstate.
   (c) Picric Acid.
   (d) Potassium ferrocyanide.
4. Reagents used in connection with the above.
   (a) In connection with the sugar tests, sodium carbonate.
   (b) In connection with the albumen tests, citric acid.

The case contains, also, instructions for the use of the test papers, Vogel's scale of colors and a card with the test lines employed by Dr. Oliver in quantitative estimations of albumen.

The apparatus consists of

(1) Two test tubes, one of them graduated.

(2) A graduated minim pipette.

(3) A set of six specific gravity beads, which have the advantage over the ordinary urinometer that they may be carried in the pocket without danger of breakage.

The graduated apparatus enables physicians to make quantitative tests as well as qualitative tests.

Further information in regard to the use of test papers in the examination of urine will be found in a paper read by Dr. C. W. Purdy before the Chicago Medical Society (*Journal American Medical Association*, May 17, 1884; *Therapeutic Gazette*, May, 1884), and in Dr. Oliver's admirable monograph on "Bedside Urine Testing" (London, H. K. Lewis, 136 Gower street, W. C., 1884).

CARBON BISULPHIDE and benzoline, equal parts, burned in a common benzoline lamp, give off sulphurous acid, and are a useful means of disinfection.—*Asclepiad*, Oct.; *The Polyclinic*.

KAIRINE (*Arch. Pharm. Jour.*).—Dr. Queirolo reports in the medical clinic, Genoa, that kairine hypodermatically reduces temperature with greater rapidity, and for longer time, than when taken internally; the dose may be smaller and less frequent; the smarting quickly ceases. Dissolve by heat 1½ to 8 grains in 15 minims distilled water, and use at temperature 86° to 95° F.

ANTIPYRIN(E), made synthetically of the Chinoline series, brought forward by Dr. Knorr, of Erlangen, is a white crystalline powder of faint taste, easily masked (disagreeable bitter given in capsules—*Can. Med. and Surg. Jour.*). After doses of from one drachm to a drachm and a half, divided into three parts, taken at intervals of an hour, the temperature gradually falls after the first hour to the extent of 2½° to 3½° F., and remains at lowest point for an hour or two, reacting to the original height, if permitted, in from six to eighteen hours. Guttmann, of Berlin, from its use in twenty-seven cases, regards it as a more certain antipyretic than quinine; the fall of temperature is slower than with kairine; the subsequent rise is also slower, and, hence, not with chills. For hypodermatic use, dissolve with heat 15 grains in 8 minims of water.

THALLIN, a product of synthesis, discovered by Professor Skraup, is now being experimented with in Nothnagle's clinic in Vienna. As described by Professor Dr. Von Jaksch, before the Medical Society of Vienna, thallin is a base of the secondary chinolin series, its chemical name being tetrahydroparachinanisol. Its salts are very soluble in water, have an acid reaction, and when decomposed by a solution of chloride of iron and other oxidizing substances, form green salt; hence the name thallin. Jaksch has made and experimented with the chlorate, sulphate, and tartrate of thallin, and with a salt of another thallin base, the chlorate of ethyl-thallin. In eighty-six cases of fever he has found that in doses of from 4 to 12 grains they are all reliable antipyretics. But, as pointed out by Jaksch, kairin, chinolin, antipyrin, and other products of synthetic chemistry, are simply antipyretic, and of but little value therapeutically. Thallin is an improvement on its immediate predecessors, kairin and antipyrin, as its use is not attended with those occasional untoward symptoms and sequelæ which have complicated their physiological and therapeutic effects; there are no debilitating

perspirations, sudden and unaccountable rises of temperature, and occasional severe rigors which mark the records of the other products. The antipyretic effects of thallin last longer than those attained by means of kairin, and the subsequent rise of temperature is gradual.

The author is experimenting with parachinanisol, which, according to Skraup, resembles very closely the half molecule of quinine, but so far the results are not encouraging. Another chinolin derivative, tetrahydroparaoxychinolin, seems from Jaksch's experiments to be a poison of great virulence. Rabbits died in convulsions two hours after administration of less than a grain.—*Nat. Druggist.*

GLYCERINE FOR INDIGESTION with duodenal catarrh, etc., and in infants which have been fed shortly after birth, is advised by *The Medical Index.*

AMENORRHŒA.—Drs. Ringer and Murrell in the *Lancet:* Potassium permanganate, one grain three times a day, increasing to two grains four times a day, is said to bring on menstruation in three or four days after the administration of the latter quantity. Manganate of soda and binoxide of manganese are equally efficacious.

HEADACHE.—Carbon bisulphide solution is poured on sponge or cotton in a wide-mouth, glass-stoppered vial; the open mouth of the vial is closely applied over the seat of pain for a few minutes.—*Phys. and Surg. Investigator.*

ACNE is often reflex from urethral irritation. Dr. S. Sherwell obtained marvelous improvement in the faces of two patients, after long treatment had failed, by passing cold sounds every third day. The urethra was found sensitive, especially at about the junction of the membranous portion with the prostatic.—*Jour. C. and V. Dis.*

BOILS.—To prevent a succession, boil a handful of lead shot in a pint of milk, for twenty minutes, and drink the milk at supper. Do this three nights in succession, omit it for three nights, and repeat it for three nights.—*F. R. Millard, M.D., San Diego, Cal., in Med. and Surg. Reporter.*

OBESITY.—Dr. Schweninger's treatment of Prince Bismarck consists of abstinence from drinking at meals and for two hours before and after.—*Med. Age.*

DIPHTHERIA ABORTED.—M. Coestu (*Gaz. hebd. Med. et Chir.*) has given calomel, 30 to 90 grains daily, in two doses, in 298 cases of diphtheria, with only 12 deaths.—*N. Y. Med. Jour.*

FOR STUTTERERS.—Once or twice a week, read for two hours aloud by yourself, keeping your teeth together. Read slowly and distinctly, moving the lips but not the teeth. In conversing speak slowly.—*Phys. and Surg. Invest.*

PARALDEHYDE as a hypnotic, fifteen minims to one drachm, in an ounce or more of aromatic water and syrup. Paraldehyde antidotes strychnia poisoning, but strychnia does not antidote paraldehyde.

A NEW SYMPTOM OF LOCOMOTOR ATAXY.—Dr. Julius Althaus says that very early, in some cases before ordinary gait is affected, ataxic patients lose the power of walking backwards.—*Brit. Med. Jour.*

SKIN GRAFTING.—Dr. Wilson, of Louisville, substitutes for skin the inner membrane of a hen's egg.

Prepuce skin (Dr. R. C. Lucas, in the *Lancet*), from its suppleness, thinness and vascularity, adheres when grafted even where skin from other parts has failed.

Skin from the scrotum (Dr. B. W. Jones, Vulcan, Mich., in *Med. and Surg. Rep.*), removed for variocele, was wrapped in oiled silk, packed in sawdust and ice and applied eighteen hours after the operation, with good results. Grafts cut fifteen hours after death, from the arm of a man killed in the Vulcan mine, were successful.

Skin-grafts from the frog (Dr. William Allen, *Lancet*) soon after being applied disappear, but after a short time they appear again as a thin transparent film on the surface of the granulations, some of the films being raised in the centre and depressed at the edges, forming small conical elevations. At this period the skin at the edge of the wound takes on a very rapid growth, but, curiously enough, the grafts themselves grow but little, and some stop growing altogether, this being so different from what occurs in the case of human skin-grafts. If the wound or ulcer is a large one, the rapidity of epidermal growth at the circumference also soon diminishes, unless stimulated afresh by a second application of grafts, so that often a series of settings of grafts is needed before the granulations are covered over with skin. My friend and former teacher, Chief Professor Cleland, of

Glasgow, long ago suggested privately to me, and subsequently, I believe in 1877, to his class, that in his opinion the process of healing by skin-grafting forcibly demonstrated the correctness of Stricker's view of the existence of sexes in the tissues. The colonies of epithelial corpuscles at the edges of the ulcer remain quiescent through lack of one sexual elemnnt, which the grafts no sooner supply than reproduction rapidly sets in, fertilization being probably brought about through the medium of the fluid which bathes the surface of the granulations. If the sexual theory accounts for the process, the skin that grows after the application of the frog-grafts must be of the nature of a new breed, a cross between human and frog epidermal elements. The disproportionate growth between the frog-grafts themselves and the circumferential epithelium in no way invalidates this supposition, seeing that a somewhat analogous condition exists amongst animals when families of the same species are crossed with one another, fertility being greatest on the side that tends to degeneration, and less on the side that aims at a higher development.—*Phila. Med. and Surg. Rep.*

FATAL PELVIC HEMORRHAGE from the use of the aspirator needle is reported by Dr. A. Reeves Jackson, in *Chic. Med. Jour. and Ex.*

HEMORRHOIDS are radically cured within a week by dilatation of the anus, not with the fingers, but with a speculum, sufficient to overcome the muscular contraction which impedes circulation in the superior mesenteric veins.—*Revue Medicale; Denver Med. Times.*

COLDS.—Dr. Dobell, London, instead of the hot drinks of domestic practice, and quinine and Dover's powder treatment, prefers the following: Amm. carb. gr. v; morphiæ, gr. 1-6; emuls. amygd. ℥ j; every three hours. 2. Spts. Mindereri, ℥ iss with cold water, at night, after the patient is in bed under extra blankets. Cold water to drink when there is thirst. 3. Blankets gradually removed before rising in the morning. 4. Ammonia and morphine continued once in four hours. 5. On the second night a compound colocynth pill.—*Med. Age.*

PRESERVATION OF BODIES FOR DISSECTION.—O. T. Freer, Munich: To preserve bodies three to six months, inject into the femoral artery two to four quarts of a solution of glycerine 40 parts, carbolic acid 11, alcohol 8; to preserve bodies two months, glycerine 80, carbolic acid 17, alcohol 13.—*Chic. Med. Jour.*

THE MEDICAL ANNALS:

A Journal of the Medical Society of the County of Albany.

EDITORIAL COMMITTEE:

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JNO. BEN. STONEHOUSE, M.D., WILLIS G. TUCKER, M.D.

VOL. V. DECEMBER, 1884. No. 12.

THE MEDICAL ANNALS, 1884.

With this same topic our January number began; all that was promised and implied in that number has been faithfully fulfilled. Our volume for 1884 of 384 pages compares well with the 288 pages of 1883. Our field has widened by literary contributions and by paid subscriptions from individuals remote from Albany. We especially commend to our subscribers to look through our index and to notice the thousand topics which have been presented to their attention during the year, and to realize the good measure they receive for their dollar's worth.

In addition to the mention made at intervals during the year of reprints and extracts from THE MEDICAL ANNALS which have appeared in other journals, we append the following list as a further index of public estimation:

The *Quarterly Epitome of Practical American Medicine and Surgery*, collateral to *Braithwaite's Retrospect*, edited by Dr. Wesley M. Carpenter, contains "Prophylaxis of the Parturient Breast," by Dr. Franklin Townsend, of Albany, taken from THE MEDICAL ANNALS of July, 1884, page 198, *et seq.*, and Dr. C. E. Jones' note on Avena from THE MEDICAL ANNALS, page 52, February, 1884. This last item is also copied by *The Analectic*, of New York, by *The Southern Clinic*, Richmond, Va., and others.

The Canadian Practitioner, of Toronto, has reprinted a large portion of Dr. H. Hun's article on "Digitalis in Delirium Tremens," from THE MEDICAL ANNALS, page 33, February, 1884.

The Louisville Medical News, in the issue of September 6, reprints from Dr. J. S. Delavan's account of Trichinosis at Arietta, in the August number of THE MEDICAL ANNALS, the

remarks of Dr. William Hailes, Jr., on "Prevention of Trichinosis."

The Medical and Surgical Reporter, Philadelphia, in its issue of July 26, 1884, reprints from THE MEDICAL ANNALS, June number, the "Treatment of Diphtheria," by Dr. J. W. Moore, of Cohoes. This same matter is also copied in the *American Medical Digest*, New York, October, 1884.

Prof. Clinton Wagner, of the New York Post Graduate School, on pages 201 and 233 of his volume on "Diseases of the Nose," published by Bermingham & Co., 1884, refers to, and reprints in full, "A Case of Supposed Nasal Calculus," by Dr. R. D. Clark, of Albany, published in THE MEDICAL ANNALS, February, 1883, page 34.

The Philadelphia *Medical Summary*, September, 1884, page 113, reprints the treatment of Acute Alcoholism from THE MEDICAL ANNALS, Vol. I., June, 1880, page 63.

The *New England Medical Monthly* for November, copies Dr. Paine's remark on High-potency Homœopathy from page 220 of THE MEDICAL ANNALS, 1884.

The *Medical and Surgical Reporter*, November 1, page 488, notes the treatment of Anal Fissure by Dr. John Thompson, of Albany, taken from THE MEDICAL ANNALS for September, 1884.

The *Albany Evening Journal*, December 9, reprints entire the article on Cocaine by Dr. S. A. Russell, from our November number.

The account of Dr. C. S. Merrill's use of cocaine at the Albany Medical College clinic, which first appeared in the *Medical Record*, is noted also in the *Louisville Medical News* of November 5.

THE HYGIENE OF SCHOOL DISCIPLINE.

It has popularly been believed that heredity is the principal factor in the ætiology of abnormal eyes; but the statistics given in President Bendell's address before our medical society teach that so sensitive and plastic are the tissues in childhood that children, even with normal eyes, often receive direct injury to their eyes from book-study, especially in very early school-life. This is true even with a wholesome and pleasant environment and faultless construction of buildings. The advised prophylactic is, very properly, abbreviation of school-hours *and of school-work*.

In the light of these facts, the present popular method of punishment in schools, which has been considered refined and humane, is seen to be unhygienic. When a child is nervous from a sense of receiving punishment, and is already tired and weakened by the daily allotment of school-work, to then order his confinement at school or at home until, for a punishment, he has rewritten a word from twenty-five to a hundred times, imposes a task upon the child when under a physical disadvantage, if not with a mental bias. Even if any good moral effect is gained by thus protracting study-hours, it may, by frequent repetition, be so gained at the expense of physical injury to the child. It cannot be said of this form of punishment that it intensifies the thirst for knowledge, nor is it ever attended with instruction either as to the proper posture in writing or how to hold the pen. The child, by this course, learns to regard his lesson as his punishment and enemy, instead of a personal benefit; instead of an attractive gymnastic of the mind, study becomes imprisonment. Bible haters have been made by the similar process in families of punishing a child by compelling him to commit to memory a number of Bible verses.

Solomon was a wise disciplinarian; "a rod for the fool's back" is more business-like and impressive, as well as more wholesome and satisfactory to the child, if judiciously applied, than debilitating application to extra study and unhygienic distortion of the eye.

Schools are the more healthful and more effective in proportion as they are the less tedious and stupid. The lessening of school-hours, and of "sitting in order," will doubtless be found hygienic in other respects besides the saving of eyes. The customary punishment of a whole-class by a half-hour's detention in school-prison on Friday afternoons as a penalty for the absences of a few members of the class during the week tends to show that a less number of school-hours is sufficient for every useful purpose required.

The requirement, in the state of New York, of school instruction in the action of alcoholics and narcotics adds another element —one of questionable value—to an already too diversified and copious list of studies. Is it not better to weed out all superfluities and to concentrate the energies of pupils upon essential branches?

L. H.

BOOK NOTICES.

SUCCESSFUL ESOPHAGOTOMY FOR THE REMOVAL OF FOREIGN BODIES. By LeRoy McLean, M.D., Surgeon to Troy Hospital, Troy, N. Y.

The above reprint is an exceedingly valuable contribution to this subject. Coming as it does from one who has an exceptionally large surgical practice and who has done this operation a greater number of times than any other American surgeon, it bears the stamp of authority, and will command the attention of all thoughtful surgeons. In the report of cases it is clear and full. In the description of the operation it is concise and far more distinct than many of our accepted text-books on surgery. One cannot peruse this pamphlet without feeling benefited. It is with pleasure that we commend it to our professional readers.

A. VAN DER VEER.

ELEMENTS OF PATHOLOGY. By Edward Rindfleisch, M.D., Professor of Pathological Anatomy in the University of Würzburg. Translated by William H. Mercer, M.D. (Univ. of Penn.). Revised by James Tyson, M.D., Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania, etc. Philadelphia: P. Blakiston, Son & Co. 1884. Price, $2.00.

This little work is a concise statement of the groundwork of general pathology, and is carried up to date in all the recent and accepted results of labor in the field of microphitic pathology.

The author's classification is a sensible one, being founded upon the order of symptoms observed in clinical experience.

The following brief synopsis of his table of contents shows his arrangement:

I. The Local Outbreak of Disease. This includes the consideration of the various forms of inflammation and the formation of tumors.

II. Anatomical Extension of Disease, in which is discussed Metastasis (extension by lymphatics and blood), Fever and Irritation of the Nervous System (delirium, pain, etc.).

III. Physiological Extension of Disease. This section contains the chapters on Disturbances of Nutrition, Disturbances of the Circulation, Disturbances in Blood Formation, and Disturbances in Blood Purification—*i. e.*, disturbances in the func-

tions of lungs, liver and kidneys. There is also a sub-section on the Disturbances of the Sensory-motor System.

Special part, devoted to Traumæ, Parasitic and Infectious Diseases, Defective Development, Diseases due to Overwork, and Diseases of Involution.

This etiological system of classification, appealing as it does to the physician's daily experience, commands his attention and does much towards making the book easy reading. The author's conservative attitude toward the present tendency to refer all typical or cyclical symptoms to the presence of lower organisms is to be commended. In short, the busy practitioner will find in this compendium a good *résumé* of the subject, all the better for its compactness and freedom from diffuse discussions of pet theories.

S. G. SHANKS.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK FOR 1884. 521 pp., 8vo, cloth, $1.75. Send to Dr. William Manlius Smith, Secretary, Syracuse, N. Y., or to Dr. C. H. Porter, Treasurer, Albany, N. Y.

These annual volumes of transactions always contain valuable matter, and usually have material which is indispensable to the practitioner and which reaches him either directly through the society channels or from second-hand sources. The volume for 1884 is no exception to this rule, and is larger than the usual issues. An appendix contains the laws of the state enacted in 1884 affecting the medical profession. The volume is well printed and well indexed.

Encyclopedia of Medical Humor and Curiosities. The undersigned proposes to publish a large volume under the above or a similar title, and solicits suitable material. All contributions should be addressed to Julius Wise, M.D., 806 Olive street, St. Louis, Mo.

Outing for December brings the breath of summer and her out-of-door delights into the atmosphere of our artificially-warmed rooms and in-door occupations." *Outing* is published monthly at Boston, Mass. Price $2.00 a year. Sent to subscribers to THE MEDICAL ANNALS at clubbing rate, $1.50.

Home Science, monthly, octavo, 100 pages, $2.50 a year. The Science Publishing Co., Limited, 29 Warren street, New York. *Home Science* is attractive and wholesome literature for the family. It deals with home questions and social science in gen-

eral, and discusses the live topics of the day. The contributors are prominent men and women whose views command respect even from those who do not wholly agree with them.

Oral Hygiene. By Dr, Meyer L. Rhein, D.D.S., A. M. C., '80, New York. Read before the First District Dental Society, State of New York, May 5, 1884. Reprinted from *The New England Journal of Dentistry*, October, 1884. The author's "prophylactic tooth brush" is here described and the philosophy of its use explained.

Report on the Prevention of Epidemic Cholera in America. American Public Health Association.

Protection and Free Trade To-day, at Home and Abroad, in Field and Workshop. Price 10 cents. J. R. Osgood & Co., Boston.

The Western Ploughman, Moline, Ill., monthly, 16 pp. quarto, 50 cents a year.

"Representative London Journalists" is the title of a choice engraving presented by Messrs. Root & Tinker, Tribune Building, on behalf of Messrs. R. Hoe & Co. The eleven portraits given are an ornament to any room.

PERSONALS.

Dr. Ira Harris,'81, lately returned to Albany from Tripoli, Syria, on a three months' furlough. He first sailed from New York for Tripoli, as medical missionary of the Presbyterian Board of Foreign Missions, November 6, 1883, and will again sail for the the same field of labor on December 17, 1884.

His first route to Tripoli was *via* London, Paris, Strassburg, Vienna, Budapest, Varna and Constantinople; the return west was made by an English steamer, stopping a few days at Cyprus, Crete, Patras (Greece), Malta and Gibraltar. Two days before he reached Gibraltar a Spanish vessel had landed a hundred and fifty passengers coming from a port where one death from chol had been reported. The English allowed the landing, and the passengers went across to neutral ground into Spanish City, and there they were subjected to quarantine; men, women and children were confined in a mammoth ward of a building called the Rotunda for a period of five days without beds, seats or any

accommodations; meals were sold at five shillings each, English money, and passengers who could not purchase their food were provided with simply bread and coffee.

Dr. Harris expects to spend some weeks in the eye and ear hospitals of London in January next. He says that in the cities of Homs (Humps), with a population of 30,000, and Hamath of 25,000, about one individual in twelve has lost one or both eyes. Homs is sixty miles and Hamath ninety miles north of Tripoli, and the entire territory is without an ophthalmic surgeon. For four months of the year there is no vegetation to be seen, and the dry, chalky soil injures the eye by its glare and by its dust; besides this, the Arab fear of using water makes an originally mild and simple affection of the eye serious and often fatal to vision.

Before Dr. Harris was allowed to practice he was obliged to pass an examination before the National (Turkish) Medical Board, in Coustantinople. This was done through an interpreter (the French is the official language); the examination was protracted and thorough.

In Tripoli, with 25,000 population, there are two graduates of Beyrout American Medical College (in which college the son of Dr. Post, of New York, fills the chair of surgery) and a number of uneducated native physicians. All the professors in the Beyrout College are Americans. The medical college course is on the American system of graded classes, and no candidates are graduated but thoroughly competent men.

The native practitioners have no instruction but tradition. Their usual custom is to bleed every patient, and to explain to the patient that the dark clot is diseased blood; bleeding must be repeated at intervals of a few days until the clot becomes bright; when depletion has been carried as far as the native physician deems safe, he proves to the patient, by exhibiting a clot while still fresh and red, that the blood is now purified. For pain the red iron cautery is always used; in rheumatism stripes are burned in the skin; in hernia the cautery is applied to the neck of the sac, and, instead of relieving the condition, renders the tumor irreducible. Three days after birth every child is cauterized on the crown of the head over a space of about two inches in circumference to keep away disease and the evil eye. Tumors are treated by tattooing.

Natives require large doses. One drop of croton oil has no effect; the usual dose is three to five drops. Severe surgical operations are borne with remarkable tolerance.

Dr. Harris makes surgery his specialty. In the course of his practice in Syria he has done Sayre's operation for necrosis of the ankle, and performed four lithotomies, with good recoveries. The people are very grateful for medical services, and will admit a medical missionary where other missionaries are excluded. The language spoken in Syria is Arabic, and is difficult to master.

Dr. L. E. Blair, Albany, '81, left for Europe, November 22, in order to pursue a course of studies at Vienna. He will return about the 15th of April, and will then be pleased to see his friends and patients at his office as formerly.

Dr. Samuel B. Ward, of Albany, is the physician of the President-elect and one of his warmest friends.—*Medical News*, Nov. 29.

Dr. J. F. Force, A. M. C., '71, Heron Lake, Minn., U. S. Examining Surgeon, Local Surgeon C., St. P. & O. R. R., was appointed in September, 1884, to the chair of Materia Medica and Therapeutics in the College of Physicians and Surgeons of Minneapolis, Minn., and has been filling the chair since the opening of the term, September 28, 1884.

Dr. George S. Knickerbocker, of No. 287 State street, who has practiced medicine in this city for the past year, has received and accepted the position of medical superintendent at the New York Institution for the Instruction of the Deaf and Dumb. This is the large institution situated at 165th street and North river, New York city, of which the Hon. Erastus Brooks is president. Dr. Knickerbocker left town with his family for his new post during the past week.—*Albany Evening Journal*, Dec. 1.

Titanium Emmenagogue—Latest.—Dr. A. B. Lyons, Detroit *Jour. Am. Med. Ass'n.*), analyzed a sample of carbonate titanium from one of the few houses having it, and found it over 95 per cent. ferrous sulphate and ferric oxide, and less than one per cent. titanic acid. He shows up a scheme to utilize medical journals to introduce an immoral aloetic compound. Inquiry reveals (*Weekly Drug News*, Dec. 6) that no "carbonate of titanium" has been admitted at the Customs, New York.—*Med. Age.*

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CORRIGENDA.—Page 8, line 9 from top, for "vigorous" read *victorious;* page 7, line 17 from top, for "celebrations" read *deliberations;* page 150, last line, for "work" read *word;* page 248, line 12 from foot, transpose "For example" to the beginning of the next sentence; page 253, line 13 from foot, for "Toulon" read *Marseilles.*

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